

DUPLICATE - LIBRARY
Case Institute of Technology

RECEIVED

APR 19 1954

CASE INSTITUTE LIBRARY

Eug Adin

Management RECORD

APRIL 1954 • Vol. XVI • No. 4

- The Noise Problem in Industry
- Review of Labor Statistics
- Vacations in the Electrical Contracts
- Company Housekeeping Drives



NATIONAL INDUSTRIAL CONFERENCE BOARD

CONTENTS

SPECIAL ARTICLES

Vacation Provisions in UE, IUE-CIO, and IBEW-AFL Contracts	138
Noise and Employees' Loss of Hearing (Round Table).....	143
Workmen's Compensation Problems Caused by Loss of Hearing Claims.....	143
Industry's Problems as Related to Loss of Hearing Claims	146
The Wisconsin Law and the Program of the Wis- consin Manufacturers	147
Ear Damage from Sound, and the Role of the Sub- committee on Noise in Industry.....	165
Setting Standards—Problems Involved.....	167
Discussion	169
Companies Have Housekeeping Drives.....	148
New Craft Severance Rules.....	152

REGULAR FEATURES

Briefs on Personnel Practices.....	149, 150
Trends in Labor Relations.....	152
Labor Press Highlights.....	154
Review of Labor Statistics.....	156
Significant Labor Statistics.....	161
Wage Adjustments Announced.....	172
Management Book Shelf.....	160

Management Record is prepared by

Division of Personnel Administration: S. Avery Rauba, Director; Louis A. Allen, James J. Bambrick, Jr., F. Beatrice Brower, George H. Haas, Stephen Habbe, Mary Jaros, Nicholas L. A. Martucci, George V. Moser, John O'Brien, Geneva Seybold, Harold Stieglitz, Doris M. Thompson, Hermine Zagat.

Statistical Division: Paul W. Dickson, Director; James C. Apicella, Virginia M. Boschen, Leonard R. Burgess, C. John DiCara, Bess Kaplan, Joan H. Lev, Grace Medvin, John Napier, Martha Pearson, Olive E. Vaughan, Judith Wishnia.

Editorial Staff: Aileen Kyte, Jacqueline Watson. Charts: Paulette le Corre Lydon; Anne Dermody, Lawrence M. Osborne, John E. Schmerling, Madeleine Susswein, Margaret Whittaker.

Management Record

April, 1954

Copyright 1954 by
National Industrial Conference Board, Inc.
247 Park Avenue, New York 17, N. Y.

Vol. XVI, No. 4

• In the Record •

Vacation Practices in the Electrical Unions

One of the first things an employee asks when he starts working for a company is: "When will I be eligible for vacation and how much time will I get?" He also wants to know what he may expect in the long range—after two years, five years and twenty-five.

The article, "Vacation Provisions in UE, IUE-CIO, and IBEW-AFL Contracts" takes a close and comparing look at what the contracts of the three large electrical unions do in regard to the all-important vacation. The negotiated vacation has to take into account much more than the obvious question of how much vacation for how much time worked. For instance, the contracts of the electrical unions are specific about such points as: What is the largest maximum vacation? How is pay computed? Is vacation time granted on a graduated basis or does it jump? And what about the deferred vacation and pay instead of time off? These and other questions are discussed in detail, with over-all trends in vacation practices also examined. Turn to the next page.

• • •

The Problem of Noise in Industry

A simple little word—noise—has come to have great meaning when it is used in regard to industry. It brings to the executive's mind a problem that is compounded of legal, economic, medical, technical and ethical considerations. The fact is, compensation claims for loss of hearing on the part of employees against their companies have mounted sharply in the past few years.

This growing and many-sided problem is discussed by members of a Conference Board round table in the article "Noise and Employees' Loss of Hearing." The participants, all of them experts in their fields, bring up such problems as: making the distinction between workers' loss of hearing due to normal aging and due to noise at the work site; the effect of claims on workmen's compensation problems; ear damage from sound; and individual variations in vulnerability to noise and in speed of recovery. These and other facets of the noise problem are discussed in the article beginning on page 143.

Housekeeping in Companies

Housekeeping used to be limited to the parlor and the boss's office but now it has spread to the factory. Many plant managers and workers alike have assumed a cleaning zeal that would put Mrs. Housewife to shame.

Why all this fastidiousness? "Companies Have Housekeeping Drives" stresses the point that companies find dirt dangerous. Fires, which may destroy an entire factory, are more likely to start if inflammable objects are strewn about. The article relates the experiences of several companies in putting over good housekeeping to workers. Employee publications, monthly inspection teams with rotating personnel, winners' prizes and eight-ball awards are some of the means companies use to dramatize and sell good housekeeping to workers. The results, so far, have been fine. The story starts on page 148.

• • •

New Craft Severance Rules

If a worker is a craftsman with years of apprenticeship or experience behind him in his specialized field, may he be represented by a distinct craft unit? The National Labor Relations Board recently answered a conditional "yes" to this question when it set up new rules for craft severance.

Both the majority and dissenting opinions of the NLRB board members are given in "New Craft Severance Rules," beginning on page 152. The article discusses the new definition of a "true craft unit" as well as the particulars of the cases before the board which led to the craft severance ruling.

• • •

Labor Statistics

The most recent reading made by the Board on consumers' prices in ten large cities reveals a slight decline in February, thanks to a drop in the food index. The statistics in this issue refer, however, to the January computations, when there was an upturn after four consecutive monthly declines. In addition to the facts about cost of living, the article beginning on page 156 gives the latest available picture of unemployment, wage, and workweek statistics.

Vacation Provisions in UE, IUE-CIO, and IBEW-AFL Contracts

This is the third section of a Conference Board analysis of the manufacturing industry contracts of the three principal electrical unions. Previous sections published cover union security and checkoff provisions¹ and holiday provisions.² The Board again cautions users of this study that no one section of a contract stands alone. In bargaining, for example, a vacation demand may be traded off for a holiday demand, or both may be traded for a group insurance demand. In short, the union contract must be considered as a whole. The final study, which will be published shortly, attempts to achieve this goal by analyzing all 142 UE, IUE-CIO, and IBEW-AFL contracts for their principal provisions on a contract-by-contract basis.

THREE WEEKS' vacation is the maximum allowed to employees covered by 127 of the 142 manufacturing industry contracts of the three leading electrical unions, according to an analysis by THE CONFERENCE BOARD. These contracts cover 357,627 workers.

The International Union of Electrical Workers, CIO, leads in provisions calling for a three-week maximum vacation. Of the forty-seven IUE-CIO contracts analyzed, forty-six contracts covering 195,628 workers have this maximum. The other has a four-week maximum. In comparison, fifty-three of the fifty-nine United Electrical Workers, ind., contracts covering 124,127 workers and twenty-eight of the thirty-six AFL Electrical union contracts covering 32,267 workers place a three-week ceiling on vacations for longer-term employees. (See Table 1.)

Short-term employees get their second week of vacation sooner under most IBEW-AFL contracts than under IUE-CIO or UE contracts. Most IBEW contracts grant the second week of vacation before employees have accumulated five years of service. And nearly two thirds of these contracts (twenty-one of thirty-six) covering 21,823 workers out of 34,239

workers grant two weeks for three years or less. Under IUE-CIO and UE contracts, employees most often receive their second week of vacation after five years of service. (See Tables 2, 3, and 4.)

An employee receives more than three weeks of vacation under four of the 142 contracts analyzed. He gets a maximum vacation allowance of four weeks under one IUE, one UE, and one IBEW contract. Under another IBEW contract, he can earn five weeks of vacation.

A detailed analysis of the vacation provisions of the three major electrical unions appears below.

IUE-CIO VACATION ALLOWANCES

Analysis of vacation clauses of forty-seven IUE contracts indicates a pattern of one week for one year (thirty-nine contracts), two weeks for five years (twenty-eight contracts) and three weeks for fifteen years' service (thirty-four contracts). (See Table 2.)

Three weeks is the maximum vacation allowance granted to nearly all employees covered by these contracts; this maximum appears in forty-six of the forty-seven contracts. Under thirty-three of these contracts, employees receive their three-week vacations after fifteen years of service. Nine others grant three weeks after ten years.

One IUE contract grants a four-week vacation to employees who have worked for the company twenty-five years or more. (See Table 2.)

One-week Vacation

Employees covered by all forty-seven IUE contracts analyzed get at least a week of vacation after working one year. Under thirty-nine contracts, the employee receives his one-week vacation at the end of one year's service. But under five contracts he gets one week at the end of six months' service and under one contract at the end of nine months. (See Table 2.)

Two-week Vacation

Most employees covered by IUE contracts receive their second week of vacation after five years (twenty-eight contracts). Of the seventeen other contracts with two-week vacations, four grant them after one year's service, four after two years, one after two-

¹"Union Security in UE, IUE-CIO and IBEW-AFL Contracts," *Management Record*, July, 1953, p. 242.

²"Holiday Provisions of UE, IUE-CIO and IBEW-AFL Contracts," *Management Record*, January, 1954, p. 12.

and-a-half years, and seven after three years. One IUE contract grants a two-week vacation to employees with three months' service. (See Table 2.)

Graduated Vacation Allowances

Although an IUE-CIO vacation clause pattern of one for one, two for five and three for fifteen appears in the analysis, only seven contracts limit their vacation schedules to this formula. Most of the other contracts graduate vacation allowances for each year of service. For example, a typical graduated vacation plan grants employees an additional day's vacation for each year from the second to the fourth year of service. This plan appears in five contracts.

Nearly all the remaining contracts have individual graduated vacation allowance plans which are distinct from the others. One such plan reads as follows:

"(B) All hourly rated employees who have been continuously in the employ of the corporation for one or more years on June 1 of a particular year, shall be entitled to a vacation, with pay, according to the following schedule:

Length of Service	Vacation	Vacation Pay
12 months but less than 2 years	1 wk	40 hrs
2 years but less than 3 years	1 $\frac{1}{4}$ wks	50 hrs
3 years but less than 4 years	1 $\frac{1}{2}$ wks	60 hrs
4 years but less than 5 years	1 $\frac{3}{4}$ wks	70 hrs
5 years but less than 10 years	2 wks	80 hrs
10 years but less than 15 years	2 $\frac{1}{2}$ wks	100 hrs
15 years and over	3 wks	120 hrs"

(An electrical manufacturing company and the IUE-CIO)

UE-IND VACATION PAY ALLOWANCES

Analysis of the vacation clauses of the fifty-nine UE contracts reveals the same basic pattern as the IUE-CIO contracts: one week for one year (fifty-one contracts), two weeks for five years (forty-six contracts), and three weeks for fifteen years (forty-three contracts). (See Table 3.) The maximum vacation allowance of three weeks again predominates (fifty-three of the fifty-nine contracts). (See Table 1.)

One-week Vacation

Employees under all but one of the fifty-nine UE

Table 1a: Maximum Vacation Pay Allowances in 142 UE, IUE, and IBEW Contracts

	Total			
	Companies		Workers	
	Number	Per Cent	Number	Per Cent
Total	142	100.0	357,627	100.0
Two weeks for:	11	7.7	2,490	.7
One year	1	.7	85	a
Two years	1	.7	450	.1
Three years	2	1.4	150	a
Five years	7	4.9	1,805	.5
Three weeks for:	127	89.4	352,022	98.4
Ten years	18	12.7	43,019	12.0
Fifteen years	98	69.0	303,035	84.7
Twenty years	9	6.3	5,468	1.5
Twenty-five years	2	1.4	500	.1
Four weeks for:	3	2.1	2,165	.6
Twenty-five years	3	2.1	2,165	.6
Five weeks for:	1	.7	950	.3
Twenty-five years	1	.7	950	.3

a. Less than .05%

Table 1: Maximum Vacation Pay Allowances in 142 UE, IUE, and IBEW Contracts

	UE-IND				IUE-CIO				IBEW-AFL			
	Companies		Workers		Companies		Workers		Companies		Workers	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total	59	100.0	126,660	100.0	47	100.0	196,728	100.0	36	100.0	34,239	100.0
Two weeks for:	5	8.5	1,533	1.2	0	0	0	0	6	16.7	957	2.8
One year	0	0	0	0	0	0	0	0	1 ²	2.8	85	.2
Two years	0	0	0	0	0	0	0	0	1	2.8	450	1.3
Three years	0	0	0	0	0	0	0	0	2	5.6	150	.4
Five years	5	8.5	1,533	1.2	0	0	0	0	2	5.6	272	.8
Three weeks for:	53	89.9	124,127	98.0	46	97.9	195,628	99.4	28	77.8	32,267	94.2
Ten years	5 ¹	8.5	6,302	4.9	9	19.1	26,200	13.3	4	11.1	10,517	30.7
Fifteen years	42	71.2	115,902	91.5	33	70.2	165,528	84.1	23	63.9	21,605	63.1
Twenty years	5	8.5	1,823	1.4	3	6.4	3,500	1.8	1	2.8	145	.4
Twenty-five years	1	1.7	100	.1	1	2.1	400	.2	0	0	0	0
Four weeks for:	1	1.7	1,000	.8	1	2.1	1,100	.6	1	2.8	65	.2
Twenty-five years	1	1.7	1,000	.8	1	2.1	1,100	.6	1	2.8	65	.2
Five weeks for:	0	0	0	0	0	0	0	0	1	2.8	950	2.8
Twenty-five years	0	0	0	0	0	0	0	0	1	2.8	950	2.8

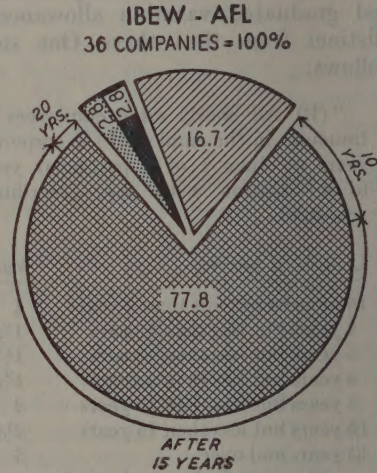
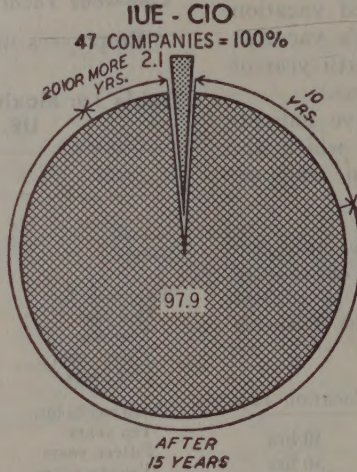
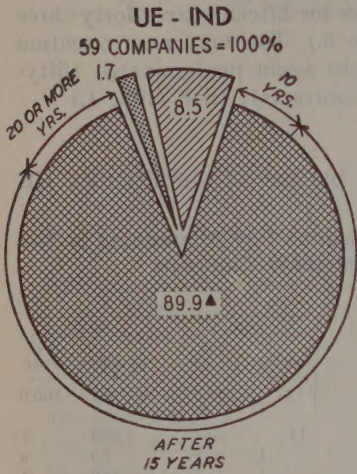
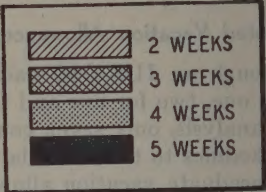
1. One contract provides a maximum allowance of two weeks vacation plus \$60 for ten years of service.

2. This contract has a graduated vacation plan for fifteen-year employees. They will get one additional day over 2 weeks for each year between 1953 and 1957 when the vacation allowance will reach three weeks for fifteen years.

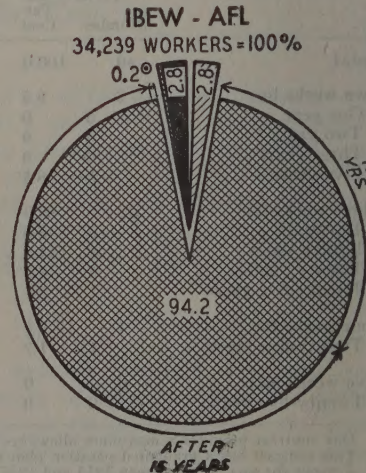
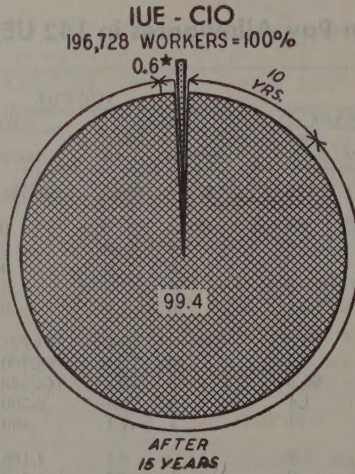
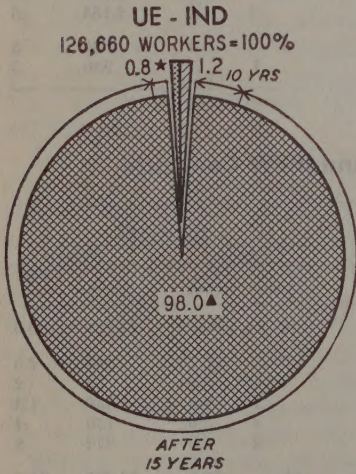
a. Less than .05%.

Comparison of Maximum Vacation Allowances in 142 UE, IUE-CIO, and IBEW-AFL Manufacturing Industry Contracts Covering 357,627 Workers

BY NUMBER OF COMPANIES



BY NUMBER OF WORKERS



★ AFTER 20 OR MORE YEARS
● AFTER 20 YEARS

▲ One contract provides a maximum vacation of two weeks plus \$60 for ten years.

contracts get at least one week's vacation by the time they have completed one year of service. The major portion of these (fifty-one) get one week after one year. Workers covered by five UE contracts get one week after six months of service. One UE contract grants one week for two years' service. (See Table 3.)

Under three UE contracts, workers accumulate vacation for each month of service and get at least one week by the end of one year. Such a clause reads as follows:

"(a) All hourly paid employees who at May 1 of any calendar year have acquired six months or more of service but less than two years of service will be entitled to three and one third hours' vacation with compensation for each month they have been on the active and continuous payroll subsequent to the preceding May 1, up to a maximum of forty hours.

"(b) All hourly paid employees who at May 1 of any calendar year have acquired two years or more of service will be entitled to hours of vacation with compensation for each month they have been on the active and continuous

payroll subsequent to the preceding May 1 in accordance with the following schedule:

Years of Service on May 1	Hours of Vacation per Month on the Active and Continuous Payroll Subsequent to the Preceding May 1
2 to 3	4-2/3
3 to 4	5-1/3
4 to 5	6
5 to 7	6-2/3
7 to 9	7-1/3
9 to 10	8
10 to 13	8-2/3
13 to 15	9-1/3
15 to 20	10
20 to 25	12
25 and upwards	13-1/3

"It is agreed that the employer has the right to require any employee to limit his time off for vacation to not more than two weeks during any vacation year." (*A manufacturing company and the UE-ind.*)

Table 2: Principal Vacation Pay Allowances and Service Requirements in Forty-Seven IUE-CIO Contracts

Vacation Allowance	Total Number of Contracts	Service Requirements										
		Months			Years							
		3	6	9	1	2	3	5	10	15	20	25
½ week or 3 days	12	—	12	—	—	—	—	—	—	—	—	—
1 week	45	—	5	1	39	—	—	—	—	—	—	—
2 weeks	44	1	—	—	4	4	7	28	—	—	—	—
3 weeks	47	—	—	—	—	—	—	—	9	34	3	1
4 weeks	1	—	—	—	—	—	—	—	—	—	—	1

Table 3: Principal Vacation Pay Allowances and Service Requirements in Fifty-Nine UE-IND Contracts

Vacation Allowance	Total Number of Contracts	Service Requirements										
		Months			Years							
		3	6	9	1	2	3	5	10	15	20	25
1 day	1	1	—	—	—	—	—	—	—	—	—	—
½ week or 3 days	18	—	17	—	1	—	—	—	—	—	—	—
1 week	57	—	5	—	51	1	—	—	—	—	—	—
2 weeks	59	—	—	—	3	1	9	46	—	—	—	—
3 weeks	54	—	—	—	—	—	—	—	5	43	5	1
4 weeks	1	—	—	—	—	—	—	—	—	—	—	1

Table 4: Principal Vacation Pay Allowances and Service Requirements in Thirty-Six IBEW-AFL Contracts

Vacation Allowance	Total Number of Contracts	Service Requirements										
		Months			Years							
		3	6	9	1	2	3	5	10	15	20	25
2 days	1	—	1	—	—	—	—	—	—	—	—	—
½ week or 3 days	4	—	3	1	—	—	—	—	—	—	—	—
1 week	33	1	2	—	30	—	—	—	—	—	—	—
2 weeks	36	—	—	—	4	6	11	15	—	—	—	—
3 weeks	30	—	—	—	—	—	—	—	4	25	1	—
4 weeks	2	—	—	—	—	—	—	—	—	—	1	1
5 weeks	1	—	—	—	—	—	—	—	—	—	—	1

Two-week Vacation

Nearly three out of four UE contracts grant employees two weeks' vacation after five years of service (forty-six of fifty-nine). Three companies with UE contracts grant two weeks after one year; one grants two weeks for two years and nine grant two weeks for three years. (See Table 3.)

Five UE contracts grant maximum vacations of two weeks.

Graduated Vacation Allowances

While twenty-nine of fifty-nine of the UE contracts studied reveal the one-for-one, two-for-five, three-for-fifteen pattern, eighteen of these twenty-nine utilize some form of graduated vacation allowance plan. The most prevalent form, appearing in twelve of the UE contracts, grants one week of vacation plus an additional day of vacation for each year between two and five.

IBEW-AFL VACATION ALLOWANCES

A larger proportion of the IBEW contracts have a two-week maximum vacation allowance than those of either the UE or the IUE-CIO. Six IBEW contracts have a two-week maximum as compared to none for the IUE and five for the UE.

Three fourths of the IBEW contracts (twenty-eight out of thirty-six) set three weeks as the longest vacation granted to employees. This compares with forty-six out of forty-seven IUE contracts and fifty-three out of fifty-nine UE contracts.

One IBEW contract sets up a four-week maximum, while another sets a five-week maximum. (See Table 1.)

The pattern of one for one, two for five, and three for fifteen is less evident in the IBEW contracts than in the other contracts analyzed. A smaller proportion of IBEW contracts grants the top allowance but more of AFL Electrical contracts grant two weeks' vacation in less than five years. Nearly two thirds or twenty-one of the IBEW contracts provide for two weeks' vacation for three years of service or less.

Fewer workers covered by IBEW contracts get an extra week of vacation for long-term service. Thirty of the thirty-six companies grant three-week vacations. Two companies grant a four-week vacation and one of these also grants a five-week vacation. When a three-week vacation is called for, most employees get it after fifteen years of service (twenty-five contracts). (See Table 4.)

One-week Vacation

Employees covered by all thirty-six IBEW contracts get at least a week's vacation after one year's service. Under thirty of the thirty-six contracts, a worker gets one week after one year; two companies grant one week after six months and one grants one week after thirteen weeks of service. (See Table 4.)

Two-week Vacation

The employee in less than half of the companies with IBEW contracts (fifteen of thirty-six) gets two weeks' vacation after he's worked for five years. Four companies grant two weeks after one year, six grant two weeks after two years, and eleven give two weeks after three years. (See Table 4.)

Graduated vacation allowance plans are not prevalent in IBEW contracts, with only eight appearing in the sample of thirty-six.

Deferred Vacations for Long-term Employees

The company which grants four weeks of vacation after twenty-five years' service also has a plan whereby long-service employees may defer parts of their vacation in order to take a longer vacation in a later year. The clause setting up this plan reads as follows:

"Section 5. To provide 'long vacations' in the future in calendar years in which the employee completes twenty-five, thirty, etc. years of continuous service, part of a vacation may be deferred and taken in a later calendar year under the following system:

REQUIREMENT FOR DEFERRING VACATION

In the calendar year in which an employee completes	Part of vacation which may be deferred
24 years of continuous service	1 week
28 years of continuous service	1 week
29 years of continuous service	1 week

REQUIREMENT FOR TAKING VACATION

In the calendar year in which an employee completes	Maximum vacation, including deferred weeks
25 years of continuous service	5 weeks
30 years of continuous service	6 weeks

"Section 6. Similar arrangements may be made to provide a maximum of six weeks of vacation in the calendar year in which the employee completes thirty-five, forty and forty-five years of continuous service. If the employee prefers he may defer only one week from the calendar year in which he completes twenty-nine, thirty-four, etc. years of continuous service so that he will have five weeks of vacation in the calendar year he completes thirty, thirty-five, etc. years of continuous service.

"Section 7. If an employee wants to defer a week of vacation, he must notify the employer in writing by January 1 of the calendar year from which he wishes to defer such week of vacation.

"Section 14. In the event of termination or suspension of service under sections 10 and 11, deferred weeks of vacation not taken shall be paid for at the rate of pay the employee was receiving in the last payroll period of the year from which each such week was deferred under section 5." (*A western company and the IBEW-AFL*)

Graduated Pro Rata Vacation Allotment

The vacation plan of the company which gives five weeks of vacation after twenty-five years is distinct from other IBEW plans in many respects. The contract sets up a detailed graduated method of paying pro rata vacation allotments to employees with up to ten years of service who are laid off during the year. In addition it provides for a sliding scale of vacation allowances for employees with eleven years or more service. The vacation clause of this contract reads, in part, as follows:

"Sec. 2. Vacation pay for those employees with up to and including ten years' seniority will be computed on a
(Continued on page 162)

Noise and Employees' Loss of Hearing

A summary of proceedings at a Round Table conference held at the 346th meeting of the National Industrial Conference Board is given below. Chairman of the meeting was Charles F. Shook, M.D., medical director, Owens-Illinois Glass Company. Panel members were:

Mary Donlon, Chairman, New York State Workmen's Compensation Board

Noel S. Symons, Special Legal Consultant, Associated Industries of New York State, Inc.

Robert A. Ewens, Executive Vice-President, Wisconsin Manufacturers' Association

Stacy R. Guild, Ph.D., Associate Professor of Otolaryngology, Johns Hopkins Hospital; Member, Subcommittee on Noise in Industry, American Academy of Ophthalmology and Otolaryngology

Walter A. Rosenblith, Associate Professor of Communications Biophysics, Massachusetts Institute of Technology; Chairman, Subcommittee Z24-X-2, American Standards Association, concerned with Bio- and Psycho-acoustic Criteria for Noise Control.

CHAIRMAN SHOOK: Industrial noise is perhaps the most serious environmental health problem confronting American industry today. It has given rise to a new type of compensation claim based on hearing loss even though no wage loss has resulted. In state after state, such claims are multiplying. Suits are piling up. Claims against one New Jersey company total \$5 million. The Wisconsin Supreme Court has ruled that loss of hearing alone is the basis for compensation.

No one can predict what the courts ultimately will decide. The problem was thrust upon industry so suddenly and has snowballed to such proportions that unless research can melt it down to controllable size, it can harm our economic system.

Some of the questions for industry—and for the medical profession and the courts—are: What types of noise and what levels are harmful? How much hearing loss is due to normal aging process? How much to noise outside the place of employment? How much to other factors (diseases the worker may have suffered, for instance) over which the employer has no control?

We need to be able to distinguish between temporary and permanent hearing loss. Individual susceptibility is a factor. The sensitivity of the ear differs from

person to person. Sound levels harmful to one employee may have no ill effect on another. Recovery rates may vary. The percentage of probable recovery already has aroused controversy in claims before courts. Attempts have been made to base findings on guesses as to how much of a claimant's hearing loss is permanent.

Merely measuring the sound level in terms of decibels alone does not tell us whether a noise is dangerous. We cannot say absolutely that noise reaches a harmful intensity at ninety decibels, or 100, or 120. It depends on the degree of hearing impairment. Only when we are able to relate one to the other will we be able to measure the effects of noise on the hearing mechanism.

In order to measure hearing damage, we must know the conditions that existed previously. Unfortunately, only a few companies include audiometric tests in their physical examinations of employees, so there are seldom any medical records on which to build a history of the case.

But the answers to all these questions—legal, medical, and others—must depend in part on a clear-cut evaluation of the effects of noise as determined by joint studies of physicians, physicists, engineers, and other scientists.

One section of our discussion today will deal with the compensation, legal and economic angles of the problems facing industry. The other part will be concerned with the technical aspects of noise in industry—what is being done to formulate standards which will determine harmful effects of noise and what help industry can get in finding a solution for its problems.

Workmen's Compensation Problems Caused by Loss of Hearing Claims

— by Mary Donlon —

THE PROBLEM of industrial noise so loud that it causes employees to have permanent hearing impairment is in reality two problems, and for each of them employers have some responsibility.

One of the problems—and I put it first in importance both to employers and to employees—is that

of adequate sound reduction precautions. It can scarcely be disputed that too many employers have done too little to reduce the noise hazards in their plants. Responsibility to do so stems not merely from decent consideration for the welfare of workers, but from enlightened self-interest.

In common with other safety and accident-prevention programs, there are values employers can realize in improved labor relations and in production. The effects of harmful industrial noise on personnel are known. Among the most persistently difficult industrial relations are those in the noisy industries, and it is precisely in those industries that worker organization has been thorough and aggressive. This is an understandable phenomenon.

Excessive noise endured seven or eight hours daily makes a person jumpy, often irritable, certainly less serene and even-dispositioned than those who spend their lives in more quiet places. When people get edgy, unforeseen and unpleasant things are most likely to happen. Often disputes and accidents that impede production and increase costs result. Behind a barrage of noise, the sounds that alert people to danger sometimes seem less alarming or are not heard at all. Temporary deafness, tinnitus—buzzing and ringing in the ears—cause discomfort or require sick absences, and thus slow down production. Excessive noise is wasteful and costly to employers.

There are some who scoff at those employers who provide quiet work places and soft pleasant music for their employees, not realizing that these are smart employers who use every possible device to reduce employee tensions and thus improve production.

There are, of course, varying degrees of harmful noise and there is a great deal of it that cannot be eliminated. Great progress is being made, however, in isolating the most noisy operations so that a minimum of workers will be exposed to the harmful noise hazard. It is even rumored that a fully enclosed drop forge has been developed. This trend to isolate the most dangerously noisy operations parallels the isolation of other hazardous operations, such as work with explosives. Under former work conditions an explosion might kill or maim a hundred workers. Now the most hazardous work with explosives is done in virtual isolation, with a minimum of workers exposed.

The second problem is the responsibility employers have under the workmen's compensation laws of many states to pay schedule awards to employees for permanent impairment of hearing as also, of course, for permanent impairment of use of members and of vision, without regard to wage loss.

One may question whether or not liability for a statutory schedule, unrelated to wage loss, is properly a part of the workmen's compensation system. The

fact is that statutory schedules are well established in the law of most jurisdictions, and the tendency today is to extend them. By way of example, New Jersey provides a schedule of awards for back injuries. Those who advocate taking away the right of workers to a statutory schedule for some one type of injury seldom advocate abolishing all schedules.

Interest is widespread both among employer associations and labor organizations in the workmen's compensation problems associated with so-called occupational loss of hearing—that is, permanent loss of hearing not causally related to an accident or to some occupational disease such as compressed air illness or chrome poisoning.

Occupational loss of hearing is an expression that has been developed to connote permanent deafness, partial or total, of a worker who is or who has been employed for a long time in an injuriously noisy place.

These problems are not peculiar to workmen's compensation in any one state. The problem is common to all those states that have in their workmen's compensation laws both comprehensive occupational disease coverage and the provision of statutory schedules which are payable without regard to actual wage loss for permanent hearing impairment. It is the conjunction of these two statutory provisions that, so the courts have held, creates the workmen's compensation obligation of employers whose work places are in fact sufficiently noisy as to be definitely injurious to workers long exposed to the noise.

Occupational deafness is not a newly discovered phenomenon, either in medicine or industry. In the German medical literature of the eighteenth century there is recognition of what was called weaver's deafness. The term "boilermaker's ear" has long been well known. Twenty years ago, the cases began to appear in court reports in this country. And the eighteenth century problems seemed simple indeed by comparison with the complex problems of our highly industrialized modern production system.

In 1948, the New York State Court of Appeals handed down its decision in the claim of Slawinski v. Williams & Company (298 New York 546). A schedule award of workmen's compensation benefits was affirmed, based on permanent hearing impairment caused by injurious exposure in a noisy work environment. Six months after the decision in the Slawinski case, the New York State Court of Appeals in another case, Rosati v. Despatch Shops Inc. (298 New York 813), affirmed another schedule award for permanent hearing impairment resulting from injurious noise in the work environment.

Slawinski worked in the forge department of his employer's factory. There were approximately 100 heavy machine hammers in that room. Rosati was

riveter in a steel plant and had worked there for twenty-seven years.

There are two other occupational loss-of-hearing cases that have been decided by the New York courts. One is *Russo v. Despatch Shops, Inc.* (280 App Div 1008, 1030), in which the issue before the court was not as to Russo's right to a schedule award for permanent impairment of hearing but solely as to which of two carriers for the employer was chargeable with the liability.

The other case is *Gabor v. American Magnesium Corporation* (275 App Div 1014), in which permanent impairment of hearing was not claimed and so there was no right to a schedule award, but there was a temporary disability from tinnitus (buzzing and ringing in the ears). Award for a short period of temporary partial disability was affirmed by the court. Gabor worked as a rotary filer in a room where eighty men did similar work.

As a result of these court decisions, claims for awards have been filed with the board by claimants who allege permanent impairment of hearing from an injuriously noisy work environment.

It is necessary that there should be standards by which the degree of noise exposure in the work environment may be measured to determine whether it presents a hazard. Equally important are standards for determining whether hearing impairment is permanent or temporary. And if it is permanent, what part of the impairment is caused by the injurious noise exposure.

The board, therefore, must have certain standards by which it may apply to a variety of different situations the principles that have been laid down by the courts of our state. Granted the fact that hearing is impaired, questions arise in other employments than those which the courts have already considered, as to the kind and degree of noise and the work environment that create an injuriously noisy work exposure, and as to the proper standards by which permanency of hearing impairment may be ascertained and how its degree shall be evaluated.

Those are problems to which scientific and medical associations have not yet themselves found complete answers, although much research and study are currently in progress. Accordingly, in September, 1952, in an effort to find standards by which evidence in loss-of-hearing cases ought to be evaluated, and in order to measure the obligations of employers and the rights of employees, the board constituted a committee of technical experts as consultants in the problems of industrial noise and the permanent effects on hearing of work in noisy environments.¹ To this commit-

tee the board referred a series of questions, to which it seemed desirable to have careful answers, in order that case records could be developed with appropriate evidence, and the determinations made that underlie award decisions. The consultants were selected for eminent attainment and experience in the field of otology and injurious noise exposure. Designated as chairman was Dr. Stacy R. Guild of Baltimore, Maryland, who is here with us today on this panel.

The questions submitted to this committee were designed to elicit practical answers for the guidance of the board and its referees.

Notwithstanding differences of experience and of viewpoint, it is gratifying to report that the members of the committee of consultants were unanimous in their report, which has been published, and copies have been distributed to you here today. Because under the New York law considerable responsibility for administration rests on carriers who have the obligation of direct payment, this report was made available to them promptly in the hope that it might be helpful. Already the carriers are adjusting their proofs to these standards, and cases are being disposed of without controversy on findings geared to the standards set in the report.

What were the questions the board presented to the committee of consultants? The board asked such practical questions as what number of decibels of noise constitutes an occupational hazard. What effect should be given to distance in measuring that hazard? What are the differences in terms of injury potential between continuous noise and intermittent, recurring, and sporadic noises?

The board sought guidance as to the test most suitable to measure noise hazard in the work environment. It needed to know when permanency of hearing impairment could be ascertained and how best to measure that impairment for workmen's compensation purposes, whether there was value in hearing aids for the kind of ear injury that noise causes, what kind of hearing loss is compensable. Can treatment reduce this type of hearing loss? What effect does age have on the amount of hearing loss that is causally attributed to occupational noise? What relation do catarrhal and respiratory tract infections have, and what are the uses and value of pre-employment and in-employment ear examinations? These were not, for the most part, questions to which there were easy answers.

The questions the board asked had not previously been answered. It was new ground the committee plowed, and the board is extremely grateful to them for the splendid report they gave us.

Like silicosis, lead poisoning, caisson's disease, chrome poisoning, and some other occupational diseases, deafness from occupational noise, as distin-

¹ A list of the committee members and part of their report was published in the January *Management Record* under the title "Noise and Loss of Hearing Claims."

guished from trauma, is a condition that develops insidiously over a period of time. There is no longer any doubt in the medical literature that excessively noisy work places are a cause of nerve injury that can result in deafness.

There are, however, still other problems in the occupational loss-of-hearing cases that call for a reasonable attitude on the part of all concerned in resolving those problems. The cooperation of both employers and unions with the board in setting up our committee of consultants encourages us to hope that reasonable solutions to these problems are possible.

Industry's Problems As Related to Loss of Hearing Claims

by Noel S. Symons

THE INDUSTRIAL noise problem, of course, involves the workmen's compensation system. That system is intended basically, as I see it, to afford prompt wage loss protection in cases of industrial accidents and occupational diseases. In this country we also have other forms of wage loss protection. For instance, we have the Federal Social Security law, which is a means of wage loss protection against old age, and unemployment insurance, which constitutes wage loss protection against unemployment. In the State of New York we have a disability benefits law which provides wage loss protection against nonoccupational illnesses.

The compensation system in this country involves employees, employers, and also—what I think is frequently overlooked—it involves the public. It is the public which in the final analysis pays the cost of compensation in the increased cost of the product or of the service rendered.

The industrial noise problem is extremely complicated because it involves so many different angles and facets. It involves engineering aspects, acoustical aspects, medical aspects, insurance aspects with all of its rating and actuarial problems, legal aspects certainly, economic aspects, and, of course, the problem is not without its social and political implications.

Associated Industries of New York State is deeply concerned about the implications of the industrial noise problem. Due to lack of adequate criteria, we have no way of estimating the potential liability, either initially or on a continuing basis. However, testifying in New York City on December 15, 1953, before the Moreland Act Commissioner, James J. Regan, the secretary of the Self-Insurers Association, stated that if 15% of the 6 million covered employees in the State of New York should each receive

an award of \$3,000—the maximum schedule under the act is \$4,800—the cost in this state would be \$2.7 billion.

Many feel that if this tremendous liability should be imposed on New York's industry, it might price the state's industry out of the market.

The amount of the awards paid to date has not been too large, but it is the potential which is alarming. The reason that the awards paid to date have not been greater is, in my opinion, the so-called six-month waiting period recommended by the committee of consultants. This simply means that no man can get an award as long as he is continuing to work in the high-noise level; he has to be separated six months or more so that the permanency of the loss can be evaluated.

This ruling, which has been accepted and adopted by the Workmen's Compensation Board, is an administrative ruling. It is nothing that is contained in the statute or the law itself, and because of a possible shift in medical opinion, it might be changed at some time in the future. So I feel that the six months' postulate certainly does not solve our basic problem in New York; it does not prevent industry in the state from feeling that the industrial noise problem is a sword of Damocles hanging over its head.

There are several reasons why the problem is so serious. First, we are departing from the wage loss concept, the original basis of the compensation system in this country. This concept grew out of what amounted to a compromise between labor and industry and was predicated upon the principle of partial reimbursement for loss of income rather than damages for the injury as such. The system established the principle of liability without fault, and did away with all questions of negligence and contributory negligence.

In a few cases, such as the schedule awards due to accident, the loss of earnings was for reasons of administrative expediency created by statutory presumption rather than being made dependent upon actual proof. But impairment of earning capacity was the fundamental substructure on which the whole system was built and to which insurance rates for coverage had been geared. I think that is a very clear implication of the schedule provisions themselves which establish a presumed period of disability stated in terms of weeks at a compensation rate derived from the wages or actual earning capacity.

Apart from the law of accident to which the schedules generally are applicable, the wage loss concept was, at least in my opinion, the basis of our occupational disease statute in the State of New York. And it was under this statute that industrial loss of hearing was held to be an occupational disease. I think that is clearly shown by the definition of disability which ap-

plies to all occupational diseases, and I am going to quote it:

"Disability is the state of being disabled from earning full wages at the work at which the employee was last employed." Since a finding of disability as thus defined, and obviously meaning economic disability, is a prerequisite to an award in all occupational disease cases, it has been very difficult for employers to understand the rationale of the Slawinski case to which Miss Donlon referred.

If the principle of awards for noneconomic, physiologic, and social losses is extended, as I see it, there is simply no logical stopping point. There are many bodily organs that can have a physiologic loss or show deterioration without impairing earning capacity. Many different senses can become impaired. If the door is opened all the way to these losses which involve no wage loss, there are, as I see it, no logical boundaries or limitations.

There simply will not be enough billions of dollars available in the United States of America to pay the claims that would be made under the new expanding principle. Carried to its ultimate conclusion, that trend might jeopardize and destroy the compensation system itself.

Accrued liability means that much of the hearing loss in these cases has been accumulating over a long period of years. In many cases, almost all of the hearing loss for which industry is now being asked to pay accrued before the condition was held to be compensable. This was also during a time when the insurance rate structure did not provide for the losses and when industry had set aside no reserves to pay the claims when they matured.

The same situation occurred with regard to silicosis in the State of New York in the nineteen-thirties, and that situation involved a burden of extraordinary liability. Neither private insurance nor the state fund could afford to underwrite the risks at rates which industry could afford to pay. It caused a great deal of widespread unemployment in the dusty trades, which was not solved until responsible leaders of labor itself went to the legislature and pleaded for a scaling down of benefits so that employers could get insurance coverage at rates that would permit them to operate and make employment possible. The present situation in the noise problem can be far more serious than that of silicosis in the Thirties because noise is so much more widespread than the silica hazard.

Another complicating aspect of the problem is the fact that as yet we do not have any really adequate or satisfactory standards or criteria for knowing exactly what noise levels in industry do produce occupational loss of hearing.

What can or what should be done to meet the problem? First of all, there is a great need for more cooperation between management and labor. Secondly,

there is a need for plant studies to develop data. It is only by noise studies and audiometric examinations that we can find the ultimate answers as to what constitutes hazardous noise levels in industry.

A national coordinating or unifying agency to correlate the data in all of these different fields is needed. Next is the matter of isolating noise, or the importance of noise abatement. I think that industry recognizes its obligation to furnish the best environmental working conditions for its employees. Last October at the General Electric Company laboratory in Schenectady, Associated Industries of New York State sponsored a factory noise control conference at which there were several hundred technical representatives of different industries present who exchanged ideas about practical ways and means and methods of reducing or abating noise in different types of industrial operations. That is a virgin field and there is a great deal which remains to be done. It will be many years before the problem can be solved on that level.

As the last point, I want to emphasize again the desirability of legislation to restore the basic wage loss concept in our occupational disease laws. I am talking primarily about our occupational disease laws with all of the complicating factors that enter into occupational diseases. If we do not do this, we may be loading a monumental and perhaps impossible cost on industry and on the products of industry, which would certainly not be in the interests of the working population of the country.

The Wisconsin Law and the Program of the Wisconsin Manufacturers

— by Robert A. Ewens —

FOR MANY YEARS people in the workmen's compensation field have felt that, administrative-wise, it was good business to provide schedules whereby an injured workman is given so many weeks for certain definite injuries. Schedules, of course, lead to other problems. I may lose a finger and be back at work next week, but you may require three months. So a philosophy of money damages was injected. But it has always been the concept of the courts and of administrators that you must have two other elements. There must be a quit or termination of employment and a loss of pay.

In 1919 our Wisconsin act provided a schedule for loss of hearing. That schedule merely said: "For loss of hearing in industry, loss of hearing of one ear will be compensated at the rate of fifty weeks; loss of hearing of both ears, 333½ weeks."

(Continued on page 164)

Companies Have Housekeeping Drives

“LOCKER Inspection Startling.” This caption headed an article that ran in a company publication following a routine inspection of employee lockers. More than 450 oily shop towels and nearly 300 booklets of matches were found in the lockers.

In an attempt to impress upon workers the hazard of such conditions, the article pictured a fire breaking out in the lockers as a result of spontaneous combustion. This was further personalized by pointing out what the consequences could be. A catastrophic fire could destroy the plant—jobs would vanish and with them years of seniority and job security.

The purpose of the article was to point out the importance of good housekeeping.

Another employee publication helping a housekeeping drive is *The Sphere*, published by SKF Industries, Inc., Philadelphia. In launching the fall housekeeping drive, the publication's editor worked with the housekeeping committee by checking plants and taking pictures. Photographs were made of areas found to be in exceptionally good condition and of sections which were not up to standard. The photographs of the good areas were then published in *The Sphere*. The pictures showing those sections not passing inspection were presented to the personnel of the areas concerned to show them what was wrong and to help them bring their departments up to standard. In following editions of the paper, other departments doing exceptional housekeeping jobs are being commended.

This use of employee publications to point up the importance of good housekeeping is one of the many ways in which companies try to interest workers in participating in good housekeeping drives. There are also various other devices like monthly inspection teams, prize winning awards, low-man awards, etc.

EACH DEPARTMENT WINNER GETS PRIZE

Individual awards as well as a group citation are given to members of the department winning good housekeeping honors at the Dayton Rubber Company of Dayton, Ohio. These individual awards vary. They have included theater tickets and articles such as ball-point pens and playing cards imprinted with safety slogans. In addition, the foreman receives a large banner signifying that he is foreman of the winning team.

The group award is a citation which is framed for display within the department. A group picture is

taken of the unit and published in the monthly employee paper.

All of the manufacturing departments and warehouses participate in this good housekeeping inspection program which is a continuing procedure except for the summer months when vacations and plant inventory interfere. On the monthly inspection tour, a total of eighty units are visited by an inspection team. The team includes the safety director and two other members of his department, together with the plant superintendent and two general foremen; or with three general foremen if the plant superintendent is not a member. The plant superintendent rotates the foremen so that all have an opportunity to serve on the inspection committee.

FEW CANDIDATES FOR 8-BALL AWARD

When the Piasecki Helicopter Corporation of Morton, Pennsylvania, first inaugurated its good housekeeping program it was not difficult to find recipients for the “8-ball” award, symbol of poor housekeeping. But the situation is changing. There has been so much improvement that departments deserving the “8-ball” award are now becoming hard to find. Consequently, standards for inspection have become fairly high.

There are 108 areas in five plants which are inspected and rated each month by a committee comprised of the safety and fire supervisor, a safety inspector, and a supervisor of the department having the lowest score in the previous month's inspection. After each inspection, a list of all departments, factory and office, with scores for each month from the beginning of the year to date, is posted on bulletin boards throughout the plant. This list remains posted for one week. A portion of the monthly publication, *Tandemeer*, is also given over to a review of the housekeeping inspection. In this review the departments having the highest scores as well as the low “8-ball” award winner are publicized.

Scoring in the factory areas normally falls between seventy and ninety-eight, while the offices are inclined to run between eighty-eight and ninety-eight.

The three-man committee spends about seven hours on the inspections which are unscheduled and unannounced. A group award at the year's end is given to the department which has done the most outstanding job during the year.

Each member of the team winning the monthly good housekeeping competition at the Esterbrook Pen Company in Camden, New Jersey, receives a prize of one silver dollar. And since there are two leagues of teams entered in the competition, two sets of winners are rewarded. One league includes all office departments and the factory departments which have basically clean operations; and the other is comprised of the factory departments which are more difficult to keep clean. If the number of silver dollars given to the two sets of winners does not reach the sum of \$50, the difference between it and \$50 is paid as a company contribution to the Esterbrook welfare fund.

At the end of the year, the department having the highest average score in the two leagues wins the year's award, which is the sum of two silver dollars to each team member.

To avoid confusion in the monthly competition in case two or more teams receive equal ratings by an inspection committee, the following practice is followed. The average score for the previous twelve months' period is figured for the teams tied for first place. If this procedure does not break the tie, all teams still remaining in the competition will be declared winners, and silver dollars given to all.

Rules for the good housekeeping competition at the Esterbrook Pen Company were developed by an employee committee several years ago and have been revised and added to over the years. The competition is conducted under auspices of the company's labor-management committee and all departments except some very small offices are included.

DORIS M. THOMPSON

Division of Personnel Administration

Building Better Foreman-Steward Relations

The make or break point for labor relations in the plant is oftentimes the relationship between the foreman and the union steward. Most companies are very much concerned with improving this relationship; few have been able to do much about it.

Trans World Airlines has a program which has been of real value, it believes, in promoting cooperation between foremen and stewards.

From the beginning, the company felt that an improved foreman-steward relationship was as much a union concern as it was a company problem. Accordingly, the company started things moving by first consulting with the district officers of the union. From these discussions evolved a joint committee, which was charged with responsibility for establishing the objectives of the program and for working out subject material for a training course.

The committee was made up of representatives of the TWA industrial relations department, company foremen, union officials and stewards. This group developed a "foreman-steward" unit which has formed the basis for a highly successful training program.

As finally presented, the training program consisted of conferences attended by both foremen and union stewards. First, the group arrived at an agreement about the responsibilities of foremen and stewards. This was accomplished through discussion of case problems which brought up points encountered in day-to-day administration of the contract. The participants were asked to contribute their ideas on how these cases should be handled. Frequently it was necessary to refer to the company-union contract before agreement could be reached. As a result of

this free interchange of ideas and opinions, foremen and stewards were able to get better insight into one another's viewpoints. This helped increase understanding and improved communication.

From the discussion of these case problems came concurrence not only as to the best method for handling problems involving labor relations, but also as to the factors that should be considered before decisions were made.

Up to this point, everybody was agreed as to what should be done—in theory. But would the foreman and the steward keep these good precepts in mind when things got hot on the firing line? The answer seemed to lie in setting up a situation where the foremen and stewards could get some practice under controlled conditions before they went back to problems on the job.

Role playing proved to be the answer. Eight pre-planned situations were set up. Foremen and stewards were assigned parts and asked to play out these situations. By going through the roles they would actually perform on the job, foremen were able to practice the skills they needed in working out grievances. On their part, stewards learned to be better stewards by playing steward roles.

Could something be done to give the foreman a keener appreciation of how the steward felt in a typical labor relations situation? A reversal of roles was the answer. Foremen were asked to play steward parts, and vice versa. This gave each some idea of what it felt like to be in the other fellow's shoes.

After each role playing situation was acted out, the members of the conference group who had been wit-

nessing the performance were asked to criticize and comment on what had happened. These suggestions helped to create further agreement as to the best method to follow under a given set of circumstances. In the give and take of group discussion, a good deal of the tensions and misunderstandings that normally exist were dissipated. Foremen and stewards devel-

oped mutual respect and consideration for each other.

The foreman-steward training program proved so effective in improving relationships at Trans World Airlines Kansas City overhaul base that it was extended to Chicago and New York. At present the company is making plans to extend the program to all maintenance foremen and stewards.

Briefs on Personnel Practices

Planned Advancement for Hourly Employees

Hourly and nonsupervisory salaried employees at Hotpoint Company have an opportunity to do something about their own progress under the company's planned advancement program. Any employee who is interested completes a "planned advancement" form, which provides space for details about his education, training, experience and job interests.

These questionnaires, plus the materials in the personnel folder, form the basis for an inventory of employee skill and aptitudes which is maintained by the industrial relations department. Over the past several years, the information thus provided has enabled the company to make a great many promotions from within the employee group. It has also helped to achieve considerable stability in the over-all work-force.

Open House Brings Unexpected Dividends

For some weeks after its recent open house, the employment offices of the S. Morgan Smith Company of York, Pennsylvania, overflowed with job applicants. A number of unskilled and semiskilled workers were hired.

Commenting on its experience, the company's director of industrial relations said: "This was our first open house. We had just completed a new plant, and we thought it would be a good idea to invite the neighbors in to look us over. More than 3,500 came! For two or three months afterwards we were swamped with people wanting to work for us. This was an unexpected by-product, or dividend, of the open house."

Squadron System Began 1913

Goodyear Aircraft recruits most of its nontechnical men for supervisory and administrative jobs from leading colleges. These men get their introduction to the company through a squadron training program used by Goodyear since 1913. The program is sometimes referred to as the "learning-by-doing system." At the present time 135 men are enrolled in this part of Goodyear's over-all training activities.

Squadron trainees are paid for classroom attendance. They wear overalls on factory assignments and business suits when working in offices. Evening classes for two hours each week are required at Goodyear Industrial University for each squadron member. Here they learn the theory behind their jobs. For two years squadron trainees work all regular factory shifts.

Goodyear reports a 96% retention of squadron graduates.

Improving Communication in the Decentralized Organization

A company with fully decentralized operations frequently encounters the problem of letting the field organization know what is going on in central headquarters. This is a matter of some importance to Yale & Towne, which has six domestic and three foreign operating divisions, with a total of fourteen plants. All operating divisions are autonomous. Central staff services are furnished by a small headquarters executive group in New York.

Yale & Towne is happy with its decentralization. But it finds it must take special pains to keep the operating divisions in touch with the central staff, and vice versa. As the company sees it, there are three ways of doing this: Inform the operating divisions about the service, coordination and control functions of the headquarters group; keep everybody acquainted with past activities and future plans; and give headquarters and division staff counterparts an opportunity to know one another on a first-name basis, including executives from the foreign operations.

The company is attempting to reach these objectives through an annual senior management conference. The first such conference, held recently in Pennsylvania, was attended by 120 top company executives. After a general meeting, which the company officers addressed, the group broke down into panel and seminar discussions. Each of the latter was devoted to one activity and was chaired by the responsible central staff executive.

The industrial relations seminar, for instance, was led by the executive office personnel administrator.

He started the proceedings by outlining company-wide projects and functional budgets. Industrial relations directors of the various operating divisions then read papers and led discussions on such topics as organization planning, executive development, foreman training and communications, as related to their own divisions and the company as a whole.

As a follow-up, each participant receives a bound copy of all the talks and discussions. He is also asked to suggest ideas for the next annual meeting.

The company feels that the senior management conference has been of real value. It has helped get everyone acquainted, clarify policy, establish uniformity of purpose and develop effective communications in the top management group.

What Size Should Recruitment Booklets Be?

Booklets prepared by companies interested in recruiting college seniors now come in all sizes and shapes. This makes little difference if the company's booklet is distributed individually to students. But more commonly a copy of the booklet is sent to the placement office of the college where it will be prominently displayed and read by all interested.

According to one college placement director, a company offering an odd-sized booklet will find itself at a disadvantage in the future. In the *Journal of College Placement* for December, 1953, J. E. Wood of the University of Omaha describes the advantages of a standardized display case for company literature. The case is designed to accommodate 168 booklets of three sizes: 8½" by 11", 4" by 8¾", and 5½" by 8¾". These, according to Mr. Wood, are the three sizes now most common. Smaller booklets may be lost in the display case; larger ones will not fit the compartments.

Mr. Wood also suggests that the name of the company be printed in large letters at the top of the booklet. If this is done, the booklet can be identified easily while in the rack.

"Saussigis Con Polenta" for Lunch?

Employees of McDonnell Aircraft Corporation in St. Louis occasionally get the chance to sample savory food prepared in continental fashion. This opportunity to taste the foods of other nations comes about because the manager of the company-operated cafeteria is of Polish descent, while the chef is of Swiss descent. Both have had more than thirty years of experience in the gastronomical field.

There is a French day when *entrecote a la Bercy* (braised veal sweetbreads with vegetable garnish) and other French national dishes are served; an Italian day for *Prosciutto a la Leonardie* (Italian cooked ham) and other specialties of Italy; a German day for

dishes such as *linsen suppen* (lentil bean soup), etc. A typical menu is given for "Recipes of All Nations" day.

ZUPA GRZYBOWA (Poland)

Soup made of mushrooms, stock, potato flour, butter and sour cream

VISCHKOEKJES (Holland)

Cakes made of fish, potatoes, eggs, milk, butter, parsley, nutmeg and seasonings served with pea sauce

SAUSSIGIS CON POLENTA (Italy)

Link sausages, served with Italian Polenta made of corn meal and topped with succo and parmesan cheese

OMELETTE AUX FINES HERBES (France)

Egg omelette prepared with fine herbs

BOILED YEARLING BEEF BUTTER NOODLES (USA)

Kernal of beef boiled with spices, served with noodles and gravy

Employees Flock to Foot Clinic

There is a site on the ground floor of a centrally located building of the Crouse-Hinds Company plant at Syracuse, New York, which is very popular every Wednesday. Here employees suffering from corns, callouses, bunions, fungus infections and other foot ailments can get advice and treatment.

Since the foot clinic was established eight months ago, approximately 270 of the company's 2,300 employees have made use of it and many others are awaiting appointments. The clinic is serviced by a local Syracuse doctor. About fifty patients are treated each week. At the beginning, the clinic was open for only a half day but heavy patronage made it necessary to increase the schedule to a full day.

Customer Leads from Employees

Friends and acquaintances of employees are a potential source of business which is often neglected. To tap this source, the General Petroleum Corporation, at Los Angeles, has distributed this illustrated form to its employees. The form is a self-sealer envelope addressed to the trade relations department of the company.

TRADE RELATIONS COMMITTEE: _____ DATE _____

I have talked to the person below about General Petroleum products and believe we might develop some new business with his firm. I have his permission to ask one of our representatives to call on him.

NAME OF INDIVIDUAL
TO SEE _____

TITLE OR POSITION _____

NAME OF COMPANY _____

ADDRESS _____

REMARKS _____

NAME OF EMPLOYEE _____

SUPPLYING INFORMATION _____

DEPARTMENT _____ POSITION _____

NEW CRAFT SEVERANCE RULES

THE NATIONAL Labor Relations Board set up new rules governing the granting of craft severance in representation elections. The new rules permitting craft severance will be extended to all industries except those specifically exempted by the board's National Tube doctrine. The exempted industries are: basic steel, basic aluminum, lumbering, and wet milling.

In a case involving the employees of American Potash and Chemical Corporation, Trona, California, the NLRB formulated two criteria, either or both of which may be used to determine whether the board will permit craft severance.

- A "true craft unit" must exist. The board defines a craft unit as one in which there is "a distinct and homogeneous group of skilled journeymen craftsmen, working as such, together with their apprentices and/or helpers." To be a journeyman craftsman, the board says an individual must have "a kind and degree of skill which is normally acquired only by undergoing a substantial period of apprenticeship or comparable training." The board stated, however, that it will accept "an experience equivalent" instead of apprenticeship.

- A departmental unit that a craft union is seeking to represent must be "functionally distinct and separate" and the petitioner must be "a union which has traditionally devoted itself to serving the special interest of the employees in question."

The new rules were set forth in an opinion signed by Chairman Guy Farmer and board member Philip Ray Rodgers, both Eisenhower appointees. Board member Abe Murdock, in a separate opinion, agreed to the general formulation of the rule. Board member Ivar Peterson dissented. He predicted wholesale raiding of industrial units by craft unions as a result of the new NLRB rule.

In the American Potash case, three separate craft unions petitioned severance for groups of workers that they claimed they were entitled to represent. The petitioning unions, all AFL, were the Electrical Workers, the Operating Engineers, and the Machinists. Opposing the petition of these three unions were the company, the AFL Chemical Workers and the unaffiliated Mine, Mill and Smelter Workers. Both of these unions had urged a plant-wide unit.

At the present time all workers, with the exception of a machine shop unit, are represented by District

50, United Mine Workers. The AFL Machinists represent the machine shop employees. District 50 could not get on the ballot or argue the case because John L. Lewis has refused to sign the noncommunist affidavit.

Petition for Craft Unit

The International Brotherhood of Electrical Workers, AFL, claimed a unit of all electricians in the plant excluding the powerhouse electricians and other powerhouse personnel. These were left to the AFL Operating Engineers under an IBEW jurisdictional agreement with that union. The board ruled that workers who install and maintain electrical equipment are true craft workers and that an apprenticeship program is in operation for them. The board therefore granted the IBEW's petition and ordered a separate election in which the employees in the electrical department will be given this choice: the Electrical Workers, AFL; the International Chemical Workers, AFL; the International Union of Mine, Mill and Smelter Workers, ind.; or no union.

Set Up Departmental Unit

The AFL Operating Engineers petitioned for a separate election for all employees under the supervision of the company's powerhouse foreman. The board said that while powerhouse personnel do not have an apprenticeship program, it ruled in favor of the AFL Operating Engineers' craft severance petition because the "operating personnel constitute an appropriate departmental unit" and "they are requested by the union which historically and traditionally represents such a powerhouse unit." Therefore, the board ordered a separate election for powerhouse personnel in which they will have the opportunity to vote for: the AFL Operating Engineers; the AFL Chemical Workers; the independent International Union of Mine, Mill and Smelter Workers; or no union.

The International Association of Machinists, AFL, also requested craft severance for three units: all pump packers and oilers in the engineering division, all riggers and crane engineers in the engineering division, and all toolroom keepers. The board ruled that these three groups could not be considered homogeneous craft units because no apprenticeship program or its equivalent exists and the workers are unskilled. The IAM's petition for craft severance was denied.

The board lumped all other workers, except plant

guards and supervisors, together as production and maintenance workers and ordered a third separate election for them in which they will choose between: the AFL Chemical Workers; the independent Mine, Mill and Smelter Workers; or the AFL Machinists. The NLRB order stipulated that if the majority of employees voting in the elections in which the AFL Electricians and the AFL Operating Engineers seek separate units does not vote for these unions then "that group will appropriately be included in the production and maintenance unit." In such case the board ordered that their votes shall be pooled with those voting in the production and maintenance unit.

End of National Tube Doctrine

The NLRB in the American Potash decision declared an end of extension to other industries of the NLRB's National Tube doctrine which had been in effect since 1948. In that decision the board found that in the basic steel industry, because of prevailing industry pattern and integration of operations, craft units were inappropriate. The NLRB therefore refused craft severance. The board later extended this same doctrine to the basic aluminum industry, the lumbering industry, and the wet milling industry. In these industries the board likewise refused to grant craft unit severance.

In handing down the American Potash decision the NLRB said it wished to "make it clear that the National Tube doctrine will not be further extended, and that the practice of denying craft severance in industry after industry on the so-called integration of operations theory will not be further followed." The board, however, said that it did not wish to upset a pattern of bargaining it had already established, and that it would not entertain petitions for craft severance in the four industries to which the National Tube doctrine already extends.

Majority Decision

On the new craft severance rule, the majority opinion said:

"In adopting our new rule, we wish to make it clear that the requirement that the unit that seeks to be severed must be a true craft group will be rigidly enforced in cases where severance is sought on that basis. We propose to exercise great care in making certain that in the administration of this rule only groups exercising genuine craft skills will be embraced within the ambit of the rule, and that the requirements will not be relaxed over a period of time. . . . We are also of the opinion that under the rule we are adopting, fewer groups will be severed but that, at the same time, the principle of craft independence will be maintained."

Dissent Predicts Wholesale Raiding

Dissenting board member Ivar Peterson would have denied craft severance to the electricians and power-

house employees. In his dissenting opinion Mr. Peterson said:

"For the first time in eighteen years of administration of this act, the board today lays down the flat rule that, whenever requested by a union that traditionally represents such employees, craft units or other fractional employee groupings must be split off from an established industrial unit. . . . I am firmly persuaded that in many cases, as in the one before us, the cause of industrial peace will not be promoted by the fragmentation of an established bargaining unit through which the employer and his employees have for years worked out their mutual problems and achieved a measure of stability. Unions that customarily represent employees in a particular craft, trade or occupation now have an open invitation to invade industries and plants where stable industrial-type bargaining relations have existed for a substantial period. Indeed, the majority's decision gives positive assurance that a raid will not be turned aside by this board no matter how compelling the evidence and arguments the employer or the incumbent union may present in support of the broader unit they have found, on the basis of experience, best fits the needs of the employer and his employees."

Strikes in 1953

Strike idleness declined to 27 million man-days in 1953. This compares to 59,100,000 man-days for 1952 which was marked by a fifty-nine-day steel strike, as well as several other nationwide strikes. The high point for the postwar era was 1946 with 116 million man-days idle.

Fewer workers were involved in 1953's disputes—approximately 2,300,000 as compared to 3,540,000 in 1952. The number of strikes, however, remained about the same—5,100 for 1953 as against 5,117 for 1952.

Work Stoppages, 1946-1953

Period	Stoppages Beginning in Year ¹		Man-Days Idle During Year (All Stoppages)			
	Workers involved					
	Number	Number (Thousands)	Per Cent of Total Employed	Number (Thousands)	Per Cent of Estimated Working Time	Per Worker Involved
1953 ²	5,100	2,300	5.4	27,000	.6	11.7
1952	5,117	3,540	8.8	59,100	.2	16.7
1951	4,737	2,220	5.5	22,900	.4	10.3
1950	4,843	2,410	6.9	38,800	.6	16.1
1949	3,606	3,039	9.0	50,500	.4	16.7
1948	3,419	1,960	5.5	34,100	.4	17.4
1947	3,693	2,170	6.5	34,600	1.4	15.9
1946	4,985	4,600	14.5	116,000	0.2	25.2

¹ All known work stoppages arising out of labor-management disputes, involving six or more workers and continuing a full day or shift or longer are included in reports of the Bureau of Labor Statistics. Figures on "workers involved" and "man-days idle" cover all workers made idle for one shift or longer in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary estimates

JAMES J. BAMBRICK, JR.

GEORGE H. HAAS

Division of Personnel Administration

DURKIN ANALYZES T-H AMENDMENTS

FORMER secretary of labor, Martin P. Durkin, says the Taft-Hartley amendments called for in the Smith bill "would present the laboring man with a statute even more restrictive than the T-H Act. . . ." Writing in the *Journal* of the AFL Plumbing and Pipe Fitting union which he heads, Mr. Durkin calls four of the changes in the Smith bill "definitely hostile to the unions." These four, according to Mr. Durkin, would:

- "Destroy the present mutual duty to bargain collectively on matters not covered by existing contracts. . . ."
- "Grant power to the state to limit the right to strike. . . ."
- "Extend to representative and election matters the immunity now granted to statements in unfair labor practice cases. . . ."
- "Require a strike vote . . . for the purpose of permitting the continuance of a strike—clearly a strike-breaking and union-busting provision."

Three amendments in the Smith bill are labeled "meaningless" by Mr. Durkin. These, according to him, would: "Permit secondary boycotts in construction job sites under very restricted conditions which rarely ever occur; apply the anticommunist affidavit to employers; and postpone representation elections for specified periods during an economic strike unless requested by the striking unions."

The other amendments called for in the Smith bill—including those that grant a seven-day union shop in the construction and maritime industries and those that repeal the mandatory advance injunction requirements of the present law in secondary boycotts—are labeled minor improvements by Mr. Durkin.

Other areas in President Eisenhower's labor program which were not covered in the Smith bill "seem to foreshadow legislative action unfriendly to labor," says Mr. Durkin. These areas, according to his statement, include:

- "The question of how far to limit the jurisdiction of the National Labor Relations Board and to confirm broader authority upon the states. . . ."
- "Corrective legislation for health and welfare plans."
- "Recommendations on the question of limiting present federal authorities so as to give the state its

broader freedom to enjoin striking and picketing in labor disputes."

In commenting on the "hostile" nature of the Smith bill, Mr. Durkin notes that thirty-four amendments to the Taft-Hartley Act were proposed and adopted by previous Republican leadership in Congress under Senator Taft. None of these amendments, according to Mr. Durkin, "were like the four hostile amendments of the Smith bill. . . . Only six of the Smith bill amendments reflect proposals previously adopted by the Republican leadership." Mr. Durkin concludes that the Smith bill falls far short of the amendments previously recommended by Senator Taft. "Moreover," adds Mr. Durkin, "the details of the president's three additional recommendations which have not been made public may go even further towards stiffening the antilabor bias of the statute."

UE's Largest Local Switches to IUE-CIO

The shift to the CIO's International Union of Electrical Workers by UE-ind.'s Local 301, representing 20,000 workers at the Schenectady plant of General Electric, "means the IUE-CIO represents at least 100,000 workers," reports *The IUE-CIO News*. There are about 125,000 organized production, maintenance and salaried GE workers, according to IUE. With Local 301 gone, the IUE claims that the UE is left representing fewer than 20,000 employees in only scattered locals. The switch, reports IUE, was accomplished by Leon Jandreau, Local 301 business agent who accepted IUE President Carey's proposal to join the CIO Electrical Union with full privileges of all other IUE locals. According to Mr. Jandreau, thirty-seven out of thirty-eight members of the Local 301 executive board and 90% of the shop stewards supported the switch.

As a side light of the Local 301 disaffiliation, the IUE reports that two top UE officials, President Albert Fitzgerald, and Secretary-treasurer Julius Empsak, temporarily lost membership in the UE. Both men were members of Local 301. This is Mr. Fitzgerald's second loss of a home local. Earlier he belonged to Local 201 in Lynn, Massachusetts, which switched to the IUE in 1949.

Financial Statements from AFL Unions

Total income of the AFL Teamsters' union amounted to \$7,230,348.64 for the fiscal year ending December 31, 1953, according to the financial statement in *The International Teamster*. Per capita taxes accounted for more than \$5,750,-

000 of revenue. Return on investments, the second largest item of income, added \$632,000, and initiation fees brought in \$626,000. Total expenses for the year amounted to \$4,858,-956.84. The Teamsters set their total assets at \$31,638,-516.59, with net worth amounting to \$31,487,922.92.

The AFL Railway and Steamship Clerks, for the fiscal year ending December 31, 1953, had total revenues of \$3,994,034.04 and expenditures of \$2,946,365.46, according to the financial statement in the *Railway Clerk*. Per capita tax and initiation fees accounted for \$3.7 million of the union's income. Net worth of the union increased by \$1 million over the previous year. As of December 31, 1953, the union's net worth was \$9,443,140.93.

Expenditures during the fiscal year ending December 31, 1953, topped receipts of the Pulp and Sulphite Paper Mill Workers' union, according to the union's *Journal*. Total receipts were \$1,685,959.33 with all but \$80,000 coming from dues. Expenditures were \$1,718,116.22. The union's total assets and net worth are listed at \$3,263,184.88.

Machinists Ready to Sign No-Raid Pacts

The International Association of Machinists, AFL, claiming a peak membership of 900,000, is the "first major AFL union" to support the no-raid agreement between the CIO and AFL, reports *The Machinist*. Approval of the no-raid pact came at the IAM executive council meeting in March when President A. J. Hayes called for "a closing of ranks" in order "to get on with the job of organizing."

The Machinist also reports that the IAM is working toward jurisdictional agreements with other AFL unions. Pacts have already been signed with the AFL Teamsters and the AFL Printing Pressmen's Union. A tentative agreement has been reached between IAM and the AFL Textile Workers' union of America. The IAM is now negotiating jurisdictional agreements with the Carpenters, the Plumbers, and the Iron Workers, according to *The Machinist*. And negotiations are expected soon between the IAM and the Electrical Workers, the Operating Engineers, the Sheet Metal Workers, and the Air Line Pilots unions.

Oil Workers Move Toward Merger

With August 23 set as the date for the "merger convention" of various oil unions,¹ the CIO Oil Workers Union is preparing for ratification of the proposed constitution by its membership, reports the *International Oil Worker*. The major job of winning ratification by the OWIU membership will be undertaken by its president, O. A. Knight, who will start a series of conferences with international representatives and district representatives of the union.

Carpenters Open Organizing Drive

The AFL Carpenters union, which just recently refused to sign the AFL-CIO no-raid pact, has opened a nationwide organizing drive, reports *The Union Labor Record* (AFL-Mo.). The Carpenters' program is aimed at raising its mem-

bership to one million by bringing 150,000 new members into the union during this year, says the *Record*. Heading the drive will be Frank Chapman of Seattle, Washington. The *Record* reports that a membership referendum authorized a 25% per month capita tax increase to finance the organizing work.

Tracy Steps Down as IBEW Chief

Daniel W. Tracy, long-time president of the AFL International Brotherhood of Electrical Workers, resigned as of April 15, reports the *AFL News-Reporter*. He is succeeded by J. Scott Milne who has been secretary of the IBEW. J. D. Keenan, secretary-treasurer of the AFL Building and Construction Trade Department, has been named secretary of the IBEW.

Mr. Tracy has been president of the IBEW since 1933 except for the years 1940-1946 when he served as assistant secretary of labor under Secretary Frances Perkins. He now becomes president emeritus of the IBEW and retains his seat on the AFL executive council. Two other presidents emeritus are already on the AFL executive council, Herman Winter of the Bakery Union and Daniel Tobin of the Teamsters.

Labor Press Associated Suspends Service

Labor Press Associated, a major labor news syndicate that services many labor newspapers, suspended operations late in February, reports the *AFL News-Reporter*. Costs were given as a reason for suspension. To fill the gap, the *AFL News-Reporter* will send special mimeographed news supplements three times a week to all labor papers on its mailing list.

UAW-CIO to Operate TV Station

The UAW-CIO has received an OK from the Federal Communications Commission to build and operate an ultra-high frequency TV station, reports the *United Rubber Worker*. Tentative UAW plans call for a six-hour schedule of programs with emphasis on "educational and cultural news." The UAW has stated that it will accept only enough commercial time to cover operating costs of the station.

New Washington Headquarters for Two Unions

A new eleven-story headquarters building in Washington, D. C. will be erected by the AFL International Association of Machinists, reports *The Machinist*. The union, claiming 830,000 members, says its present seven-story Washington home is no longer adequate. The AFL's Retail Clerks union, whose headquarters has been in Lafayette, Indiana, since 1911, expects to be in new Washington, D. C. offices before the end of the summer, reports the *Union Labor Record* (AFL, Mo.). The Clerks, claiming 300,000 members, has bought a four-story building. Its remodeling plans, according to the *Record*, include a penthouse recreation area for employees. The Clerks expect to bring 100 employees from Indiana.

HAROLD STIEGLITZ
Division of Personnel Administration

¹For background see "Oil Workers Union Contemplates Merger," *Management Record*, March, 1954, p. 104.

Review of Labor Statistics

CONSUMERS' PRICES turned upward in January for the first time in four months. THE CONFERENCE BOARD's consumers' price index for thirty-nine United States cities rose 0.7% between mid-December and mid-January, bringing the index to a level just one tenth of an index point below the all-time high of 184.1 (January, 1939 = 100) which was established in September, 1953. Since January of last year, the all-items index has risen 2.0%.

The largest increase in any component over the month was the 1.3% rise in food prices. Higher prices of pork, lamb, and veal contributed substantially to this rise. Increases were also reported for flour, macaroni, spinach, lettuce, apples, and coffee, while general decreases were noted for milk, eggs, and carrots.

The fuel index, which includes electricity and gas, advanced 1.0% from December to January, largely as a result of increases in gas rates in several cities. The January reading for the fuel index was 142.1, a new high for this component.

Since the base date of the study, the fuel index has shown the smallest increase of any component with the exception of housing. Housing costs, which are represented in the index by residential rents, rose 0.7% during the month from mid-December to mid-January, bringing this index to a level of 136.1, another all-time high.

Sundries was the only other component to register an advance over the month, moving up 0.2%. The clothing and housefurnishings components each dipped 0.3% between December and January. Lower prices on wool carpets, women's nylon hose and end of season reductions on women's fur-trimmed coats contributed to these declines.

It can be seen from the accompanying chart that the movements in the six major components over the past year differ widely from their movements in the past month. Food prices, which registered the largest increase over the month, have shown the greatest decrease (0.9%) since January, 1953. Clothing prices are at approximately the same level as last year, and housefurnishings have dipped 0.5% in the twelve-month period. The housing index scored the largest increase over the year, currently standing 6.2% above its January, 1953, level. Sundries followed closely with a 5.6% rise over the year. During the same period, fuel prices showed a moderate rise of 0.7%.

The consumers' dollar had a purchasing value of 54.3 cents in January (January, 1939 dollar = 100 cents) compared to 54.7 cents in the preceding month. This represents a decrease of 0.7% since December and 2.0% since January of last year.

EMPLOYMENT

Unemployment rose by about 584,000 between January and February to reach a total of 3,671,000, according to preliminary estimates of the Bureau of the Census.

The current labor force figures are from the bureau's new 230-area sample introduced in January. This new series has now been adopted by the bureau and replaces the sixty-eight-area sample in operation since 1943. The new sampling technique provides wider coverage since it is based on a sample of 25,000 households distributed in 230 areas covering approximately 450 counties. The discontinued sample consisted of 25,000 households located in sixty-eight areas and about 123 counties.

Total civilian employment rose by almost 300,000 over the month—from 59,753,000 in January to 60,051,000 in February. The employed figure includes the self-employed and unpaid family workers who worked fifteen hours or more in family-operated enterprises, as well as wage and salary workers in agriculture and nonagricultural industries.

Most of the gain in employment was registered in agriculture with preparations for the spring planting season. Farm jobs totaled 5,697,000 in February, compared with 5,284,000 in January.

The nonagricultural work force was estimated at 54,349,000, about 120,000 below the previous month's total.

The total civilian labor force, which includes both employed and unemployed, came to 63,725,000—an increase of 885,000 since January.

As the new series is not comparable with the published estimate of a year ago, no contrast is possible.

NONAGRICULTURAL EMPLOYMENT

According to the latest Bureau of Labor Statistics estimates, nonagricultural employment dropped by about 300,000 to 47.5 million between January and February. A year ago the number of nonfarm employees was 48.4 million. Most of the over-the-month

loss was centered in manufacturing, where a down-trend has been evident since mid-1953. On the other hand, total nonmanufacturing employment in February was above the previous record reached a year ago.

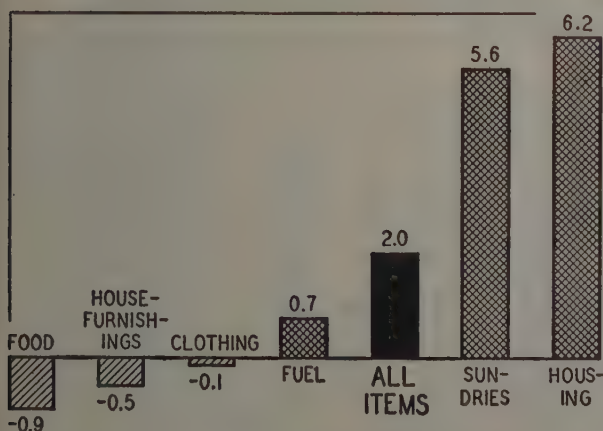
BLS points out that there were some signs of possible slackening in the rate of decline for factory employment. The reduction in nonfarm jobs between January and February was 150,000, the smallest decrease for any single month since last fall, and the factory workweek was 39.5 hours in February, practically unchanged from January.

Nearly all manufacturing industry groups reported decreases in their work force between January and February. Most of the declines were in durable goods industries, particularly transportation equipment, primary and fabricated metals, electrical machinery, and ordnance. The approach of the Easter shopping season accounted for over-the-month gains in apparel, leather, and miscellaneous manufacturing (including toys and jewelry). However, the increases in apparel and miscellaneous manufacturing were smaller than usual.

Total manufacturing employment this February was 16.0 million—about 150,000 below January and 986,000 below February, 1953.

All industry groups, except paper and printing, showed some over-the-year drop in employment. The largest declines—more than 100,000—occurred in primary metals, machinery, transportation equipment, and textiles. About half of the year's loss in manufacturing employment was concentrated in these four industries. In textiles, the work force was down to pre-World War II levels. Yet, in transportation equipment, including automobiles and aircraft, more workers were employed in February than in any postwar February before 1953.

**Per Cent Changes in Consumers' Prices,
January, 1953, to January, 1954**



Source: The Conference Board

APRIL, 1954

Lumber, fabricated metals, electrical machinery, and apparel reported over-the-year employment declines of between 50,000 and 100,000. Employment in lumber was at the lowest point for February in many years. The work force in electrical machinery was still larger than in any February of the 1946-1952 period.

Employment changes between January and February in nonmanufacturing largely conformed to the expected seasonal trends. The number of employed in nonmanufacturing industries has been maintained at record levels throughout the recent downtrend in manufacturing. Over the year, employment gains in retail trade, finance, service, and state and local government have more than compensated for decreases in mining, construction, transportation, and Federal Government.

At 2.25 million in February, the number of workers on construction contractors' payrolls was down 40,000 from a year ago. However, construction employment has generally held at high levels. Between January and February the employment decline was only 11,000 according to preliminary estimates—one of the smallest drops for this season in recent years. The number was close to the all-time peak for the month reached in 1952.

Wholesale and retail employment was estimated at 10.3 million in February, a decline of 89,000 from January. Most of the over-the-month drop was in retail trade. BLS points out that this was no more than the typical midwinter reduction in trade employment.

The number of workers on government payrolls—federal, state, and local—totaled 6.7 million in February, close to the January figure. Over the year, the increase was about 100,000, as expansion of state and local governments outweighed the continued decrease on the federal level.

In other nonmanufacturing classifications, the finance, insurance, and real estate groups showed an increase of 85,000 over the year, while transportation declined by 107,000 during the same period.

HOURS AND EARNINGS

The average workweek of factory production workers was 39.5 hours in February, about equal to the postwar low for the month reached in 1949. This is a drop of almost 1.5 hours from the postwar highs for the season reached in 1951 and 1953.

For the first time in more than six months, the average hours worked did not show a continued downtrend after allowance was made for seasonal factors. The workweek in lumber, apparel, and rubber rose by an hour or more between January and February. Seasonal factors partially explain the longer workweek in lumber and apparel, but the increase was greater than usual in these industries. In rubber, the gain contrasted with the reduction that usually occurs at this time of year.

Consumers' Price Indexes for Cities Surveyed Quarterly

NOTE: These indexes do NOT show intercity differences in price level or standards of living. They show only changes in consumers' prices in each city, which changes may be compared with those for other cities.

City	Index Numbers Jan., 1939 = 100			Percentage Changes		City	Index Numbers Jan., 1939 = 100			Percentage Changes	
	Jan. 1954	Oct. 1953	Jan. 1953	Oct. 1953 to Jan. 1954	Jan. 1953 to Jan. 1954		Jan. 1954	Oct. 1953	Jan. 1953	Oct. 1953 to Jan. 1954	Jan. 1953 to Jan. 1954
Bridgeport						Minn.-St. Paul					
Food.....	223.9	220.3	226.6	+1.6	-1.2	Food.....	248.1	245.8	247.4	+0.9	+0.3
Housing.....	120.2	120.0	118.6	+0.2	+1.3	Housing.....	120.8	115.7	113.0	+4.4	+6.9
Clothing.....	147.9	144.9	145.0	+2.1	+2.0	Clothing.....	157.3	156.6	154.8	+0.4	+1.6
Fuel ¹	174.7	174.1	171.1	+0.3	+2.1	Fuel ¹	148.1	148.6	143.8	-0.3	+3.0
Housefurnishings.....	157.8	160.4	161.8	-1.6	-2.5	Housefurnishings.....	176.4	177.2	178.2	-0.5	-1.0
Sundries.....	194.6	193.5	189.1	+0.6	+2.9	Sundries.....	191.4	191.3	180.1	+0.1	+6.3
Weighted total.....	182.4	180.6	181.0	+1.0	+0.8	Weighted total.....	188.1	186.5	182.7	+0.9	+3.0
Cincinnati²						Newark					
Food.....	242.3	236.9	235.0	+2.3	+3.1	Food.....	231.9	226.8	235.0	+2.2	-1.3
Housing.....	153.5	151.1	135.4	+1.6	+13.4	Housing.....	112.3	112.0	111.7	+0.3	+0.5
Clothing.....	158.6	160.8	159.9	-1.4	-0.8	Clothing.....	142.3	144.1	143.9	-1.2	-1.1
Fuel ¹	155.4	155.2	152.2	+0.1	+2.1	Fuel ¹	125.8	125.1	127.8	+0.6	-1.6
Housefurnishings.....	157.0	159.5	160.3	-1.6	-2.1	Housefurnishings.....	192.4	193.8	195.0	-0.7	-1.3
Sundries.....	178.3	176.2	168.8	+1.2	+5.6	Sundries.....	172.8	171.9	168.2	+0.5	+2.7
Weighted total.....	190.1	187.7	182.2	+1.3	+4.3	Weighted total.....	178.5	176.6	178.6	+1.1	-0.1
Erie						Roanoke					
Food.....	250.9	249.2	253.6	+0.7	-1.1	Food.....	235.4	236.2	236.2	-0.3	-0.3
Housing.....	174.5	154.4	142.0	+13.0	+22.9	Housing.....	159.7	158.7	156.8	+0.6	+1.8
Clothing.....	176.3	175.0	174.4	+0.7	+1.1	Clothing.....	169.0	169.0	167.2	0	+1.1
Fuel ¹	178.4	177.6	179.1	+0.5	-0.4	Fuel ¹	152.4	152.4	152.1	0	+0.2
Housefurnishings.....	166.4	167.7	169.5	-0.8	-1.8	Housefurnishings.....	172.3	172.8	175.2	-0.3	-1.7
Sundries.....	185.0	184.2	180.5	+0.4	+2.5	Sundries.....	170.0	169.6	163.3	+0.2	+4.1
Weighted total.....	201.9	197.4	195.8	+2.3	+3.1	Weighted total.....	186.3	186.3	183.9	0	+1.3
Grand Rapids						Seattle					
Food.....	240.1	236.4	237.3	+1.6	+1.2	Food.....	227.4	225.9	233.5	+0.7	-2.6
Housing.....	132.5	131.2	130.2	+0.7	+1.3	Housing.....	143.1	141.0	138.4	+1.5	+3.4
Clothing.....	140.3	140.6	140.8	-0.2	-0.4	Clothing.....	143.6	144.9	143.9	-0.9	-0.2
Fuel ¹	165.5	164.6	164.5	+0.5	+0.6	Fuel ¹	147.0	147.0	141.0	0	+4.3
Housefurnishings.....	175.8	175.9	174.7	-0.1	+0.6	Housefurnishings.....	184.6	186.1	182.4	-0.8	+1.2
Sundries.....	189.2	187.7	177.4	+0.8	+6.7	Sundries.....	170.0	170.2	164.0	-0.1	+3.7
Weighted total.....	195.0	193.2	190.3	+0.9	+2.5	Weighted total.....	180.4	179.8	179.2	+0.3	+0.7
Houston						Syracuse					
Food.....	232.4	228.6	233.9	+1.7	-0.6	Food.....	236.7	235.5	239.9	+0.5	-1.3
Housing.....	144.2	144.2	143.5	0	+0.5	Housing.....	126.1	125.9	125.2	+0.2	+0.7
Clothing.....	150.4	150.5	150.2	-0.1	+0.1	Clothing.....	159.6	161.7	160.6	-1.3	-0.6
Fuel ¹	90.1	90.1	90.1	0	0	Fuel ¹	172.6	169.4	173.8	+1.9	-0.7
Housefurnishings.....	139.3	140.0	143.0	-0.5	-2.6	Housefurnishings.....	171.6	171.7	173.6	-0.1	-1.2
Sundries.....	173.2	173.0	167.5	+0.1	+3.4	Sundries.....	163.4	158.6	155.3	+3.0	+5.2
Weighted total.....	175.8	174.8	174.4	+0.6	+0.8	Weighted total.....	178.0	176.2	176.7	+1.0	+0.7

¹ Includes electricity and gas.

² Cincinnati: Surveyed Jan. 1954, Oct. 1953, Feb. 1953.

Consumers' Price Index for Thirty-nine Cities, and Purchasing Value of the Dollar

Index Numbers, January, 1939 = 100

Date	Weighted Average of All Items	Food	Housing ¹	Clothing			Fuel ²			House- furnish- ings	Sundries	Purchasing Value of the Dollar
				Total	Men's	Women's	Total	Electricity	Gas			
1953 January.....	180.4	223.2	128.2	150.6	167.4	136.3	141.1	93.4	103.9	163.7	174.9	55.4
February.....	179.0	223.7	128.8	150.6	167.7	136.1	140.8	93.4	103.8	164.6	175.0	55.9
March.....	179.5	229.1	128.9	150.8	167.5	136.6	140.9	93.4	104.0	164.7	175.9	55.7
April.....	179.4	227.4	128.9	150.7	167.4	136.4	140.7	93.4	104.2	164.5	177.8	55.7
May.....	180.2	223.5	131.0	150.8	167.8	136.4	138.6	93.4	104.3	164.5	178.2	55.5
June.....	181.2	231.3	131.3	150.9	167.9	136.4	138.5	93.4	104.6	164.0	178.5	55.2
July.....	182.3	233.2	131.9	150.8	167.8	136.4	138.9	93.4	104.7	164.0	179.6	54.9
August.....	183.7	234.0	132.5	150.8	167.8	136.3	139.7	93.4	105.1	163.4	183.3	54.4
September.....	184.1	234.4	133.1	151.0	168.2	136.5	140.0	93.4	105.1	163.4	183.5	54.3
October.....	183.8	231.1	134.5	151.1	168.0	136.6	140.4	93.5	105.1	163.6	183.7	54.6
November.....	183.1	230.0	134.9	151.0	167.9	136.6	140.6	93.5	105.1	163.7	183.8	54.6
December.....	182.7	228.3	135.2	150.9	167.8	136.5	140.7	93.5	105.1	163.4	184.3	54.7
Annual average.....	181.6	230.8	131.6	150.8	167.8	136.4	140.1	93.4	104.6	164.0	179.9	55.1
1954 January.....	184.0	231.2	136.1	150.4	167.1	136.1	142.1	93.5	107.6	162.9	184.7	54.3

Percentage Change

Dec. 1953-Jan. 1954.....	+0.7	+1.3	+0.7	-0.3	-0.4	-0.3	+1.0	0	+2.4	-0.3	+0.2	-0.7
Jan. 1953-Jan. 1954.....	+2.0	-0.9	+6.2	-0.1	-0.2	-0.1	+0.7	+0.1	+3.6	-0.5	+5.6	-2.0

Source: THE CONFERENCE BOARD

¹ Rents surveyed quarterly in individual cities

² Includes electricity and gas

Consumers' Price Indexes for Ten Cities

NOTE: These indexes do NOT show intercity differences in price level or standards of living. They show only changes in consumers' prices in each city, which changes may be compared with those for other cities.

City	Index Numbers Jan., 1939=100			Percentage Changes		City	Index Numbers Jan., 1939=100			Percentage Changes	
	Feb. 1954	Jan. 1954	Feb. 1953	Jan. 1954 to Feb. 1954	Feb. 1953 to Feb. 1954		Feb. 1954	Jan. 1954	Feb. 1953	Jan. 1954 to Feb. 1954	Feb. 1953 to Feb. 1954
Birmingham						Indianapolis					
Food.....	236.1	237.1	230.7	-0.4	+2.3	Food.....	248.9	251.5	244.5	-1.0	+1.8
Housing ¹	167.4	167.4	163.4	0	+2.4	Housing ¹	147.1	147.1	125.6	0	+17.1
Clothing.....	152.3	151.6	152.5	+0.5	-0.1	Clothing.....	142.0	142.1	144.3	-0.1	-1.6
Fuel ⁷	137.1	137.1	136.2	0	+0.7	Fuel ⁷	160.4	160.1	162.2	+0.2	-1.1
Housefurnishings.....	169.6	170.3	171.0	-0.4	-0.8	Housefurnishings.....	156.9	154.8	157.6	+1.4	-0.4
Sundries.....	159.2	159.4	154.1	-0.1	+3.3	Sundries.....	185.0	185.5	180.3	-0.3	+2.6
Weighted total.....	181.4	181.7	177.5	-0.2	+2.2	Weighted total.....	188.7	189.5	183.2	-0.4	+3.0
Boston						Los Angeles					
Food.....	215.7	216.7	218.6	-0.5	-1.3	Food.....	218.0	220.6	230.2	-1.2	-5.3
Housing ¹	181.3	181.1	182.2	+0.2	+1.6	Housing ¹	146.1	146.1	143.1	0	+2.1
Clothing.....	141.2	141.2	141.2	0	0	Clothing.....	141.4	141.2	141.3	+0.1	+0.1
Fuel ⁷	181.4	180.4	179.9	+0.6	+0.8	Fuel ⁷	125.1	125.1	101.1	0	+23.7
Housefurnishings.....	152.7	153.1	156.3	-0.3	-2.3	Housefurnishings.....	156.2	155.2	159.8	+0.6	-2.3
Sundries.....	174.1	171.0	168.2	+1.8	+3.5	Sundries.....	180.2	180.4	170.1	-0.1	+5.9
Weighted total.....	177.2	176.7	176.5	+0.3	+0.4	Weighted total.....	177.7	178.5	176.7	-0.4	+0.6
Chicago						New Orleans					
Food.....	244.6	248.3	233.8	-1.5	+4.6	Food.....	260.7	257.4	248.9	+1.3	+4.7
Housing ¹	159.6	159.6	141.1	0	+13.1	Housing ¹	170.2	170.2	156.7	0	+8.6
Clothing.....	147.3	146.8	146.3	+0.3	+0.7	Clothing.....	158.6	158.7	156.3	-0.1	+1.5
Fuel ⁷	121.3	121.3	120.6	0	+0.6	Fuel ⁷	96.0	96.3	93.3	-0.3	+2.9
Housefurnishings.....	156.2	157.1	159.7	-0.6	-2.2	Housefurnishings.....	171.2	170.6	173.1	+0.4	-1.1
Sundries.....	183.6	183.7	176.6	-0.1	+4.0	Sundries.....	154.0	153.8	147.4	+0.1	+4.5
Weighted total.....	190.4	191.6	181.0	-0.6	+5.2	Weighted total.....	194.7	193.4	186.1	+0.7	+4.6
Denver						New York					
Food.....	239.8	241.1	233.2	-0.5	+2.8	Food.....	211.2	214.8	214.0	-1.7	-1.3
Housing ¹	132.3	132.3	128.3	0	+3.1	Housing ¹	117.5	117.5	108.0	0	+8.8
Clothing.....	163.0	162.6	163.0	+0.2	0	Clothing.....	151.1	151.4	152.1	-0.2	-0.7
Fuel ⁷	106.4	106.4	106.4	0	0	Fuel ⁷	137.9	137.9	140.7	0	-2.0
Housefurnishings.....	157.0	157.5	158.8	-0.3	-1.1	Housefurnishings.....	160.9	160.6	161.7	+0.2	-0.5
Sundries.....	164.3	164.4	159.8	-0.1	+2.8	Sundries.....	197.1	197.1	179.1	0	+10.1
Weighted total.....	177.9	178.3	173.8	-0.2	+2.4	Weighted total.....	176.4	177.7	171.2	-0.7	+3.0
Detroit						Philadelphia					
Food.....	242.1	238.2	243.6	+1.6	-0.6	Food.....	222.5	225.7	219.2	-1.4	+1.5
Housing ¹	151.4	141.7	141.4	+6.8	+7.1	Housing ¹	118.5	118.5	117.6	0	+0.8
Clothing.....	146.6	146.7	146.7	-0.1	-0.1	Clothing.....	140.0	140.5	142.7	-0.4	-1.9
Fuel ⁷	165.7	165.7	163.5	0	+1.3	Fuel ⁷	159.6	159.6	163.6	0	-2.4
Housefurnishings.....	164.3	164.4	166.3	-0.1	-1.2	Housefurnishings.....	174.5	173.1	177.0	+0.8	-1.4
Sundries.....	194.1	194.2	186.2	-0.1	+4.2	Sundries.....	194.3	187.2	180.7	+3.8	+7.5
Weighted total.....	191.4	188.3	187.6	+1.6	+2.0	Weighted total.....	183.0	182.3	178.9	+0.4	+2.3

SOURCE: THE CONFERENCE BOARD

¹ Rents surveyed January, April, July, October

² Rents surveyed February, May, August, November

³ Rents surveyed March, June, September, December

⁴ Philadelphia rent surveyed March, June, August, November, 1953 and February, 1954

⁵ New Orleans rent surveyed March, June, September, October, 1953 and January, 1954

⁶ New York rent surveyed February, May, August, November and December, 1953

⁷ Includes electricity and gas

⁸ Revised

Consumers' Price Index for Ten United States Cities, and Purchasing Value of Dollar

Index Numbers, January, 1939=100

Date	Weighted Average of All Items	Food	Housing ¹	Clothing			Fuel ²			House- furnish- ings	Sundries	Purchasing Value of the Dollar
				Total	Men's	Women's	Total	Electricity	Gas			
1953 February.....	177.3	225.2	125.7	148.2	164.0	134.9	137.9	92.0	105.3	163.4	176.6	56.4
March.....	177.7	225.6	125.8	148.4	163.8	135.5	138.0	92.0	105.3	163.3	177.4	56.3
April.....	177.6	223.9	125.8	148.3	163.5	135.4	137.7	92.0	105.4	163.2	179.2	56.3
May.....	178.4	225.0	129.1	148.4	163.9	135.3	134.5	92.0	105.4	163.1	179.3	56.1
June.....	179.7	228.6	129.4	148.5	164.0	135.3	134.5	92.0	105.4	162.3	179.5	55.6
July.....	181.1	231.1	130.3	148.3	163.6	135.4	135.4	92.0	105.6	162.4	180.6	55.2
August.....	182.7	231.3	130.5	148.3	163.6	135.3	136.4	92.0	106.1	161.6	186.2	54.7
September.....	182.9	231.4	130.9	148.6	164.1	135.5	136.6	92.0	106.1	161.7	186.2	54.7
October.....	181.6	226.3	132.8	148.6	163.7	135.8	137.0	92.0	106.1	161.8	186.5	55.1
November.....	181.5	225.8	133.1	148.5	163.5	135.9	137.0	92.0	106.1	162.1	186.6	55.1
December.....	181.2	224.0	133.3	148.5	163.5	135.9	137.0	92.0	106.1	161.7	187.4	55.2
Annual average.....	180.0	227.4	129.3	148.4	163.8	135.4	136.7	92.0	105.7	162.4	181.8	55.6
1954 January.....	182.9	228.1	134.4	147.7	162.4	135.4	139.1	92.0	110.0	161.1	187.9	54.7
February.....	182.5	225.8	135.3	147.7	162.2	135.5	139.2	92.0	110.0	161.3	188.7	54.8

Percentage Changes

Jan. 1954 to Feb. 1954....	-0.2	-1.0	+0.7	0	-0.1	+0.1	+0.1	0	0	+0.1	+0.4	+0.2
Feb. 1953 to Feb. 1954....	+2.9	+0.3	+7.6	-0.3	-1.1	+0.4	+0.9	0	+4.5	-1.3	+6.9	-2.8

¹ Rents surveyed quarterly in individual cities.

² Includes electricity and gas.

Gross hourly earnings, which include overtime and other premium pay, averaged \$1.79 in February, 1 cent less than during January. Since last September, hourly earnings have varied by no more than 1 cent from month to month, as increases in wage rates almost exactly balanced the loss in overtime pay. Hourly pay was 5 cents higher than a year earlier, largely because of increases in the first part of 1953.

Factory production workers averaged \$70.71 per week in February. This was 46 cents less than a year earlier, reflecting the shorter workweek. Over the year, increases in hourly pay outweighed the effects of the reduced workweek in many industries. As a result, weekly earnings were up substantially over February, 1953, in ordnance, electrical machinery, printing, food, tobacco, chemicals, petroleum, and stone, clay, and glass products.

JANUARY TURNOVER IN MANUFACTURING

For the first time in six months, the layoff rate in manufacturing did not rise. The BLS preliminary figure for January was twenty-five per thousand employees—the same as December. Despite this leveling off, January rates were well above the average for the month in recent years. This year's figure indicates a substantial increase over January, 1953, when the rate was nine per thousand employees. The number of layoffs continued to rise in the machinery, electrical machinery, chemicals, textiles, and ordnance industries while the rate fell in the lumber, primary metals, fabricated metals, food, transportation equipment, and miscellaneous manufacturing industries.

The hiring rate rose from twenty-one per thousand employees in December to twenty-eight in January, reflecting the usual pre-spring rise in employment in consumer goods industries. However, this month's increase in accessions, following six months of declines, was about one third below the postwar average for the month. Hiring rates increased in every major manufacturing group, except transportation equipment and stone, clay and glass products. But the pickup for pre-Easter expansion in textiles, furniture, apparel, leather and miscellaneous manufacturing was smaller than in most other postwar years. Less than usual hiring also characterized primary metals, electrical machinery, and instruments.

The rate at which factory workers quit their jobs remained unchanged from December to January. The rate usually goes up at this time of the year. The January rate of eleven per thousand employees equaled the postwar low for the month reached in 1950.

WAGE ADJUSTMENTS

For the period February 15 through March 15, 1954, THE CONFERENCE BOARD confirmed sixty-five settlements involving fifty-four companies and associations,

and covering over 209,000 employees. The most frequent increase of those granted to over 204,000 wage earners in fifty-seven settlements was 5 cents per hour. Several agreements involved no increase at all, while the National Gypsum Company granted 15.9 cents per hour to seventy-five workers in St. Louis. This is the highest average increase of those confirmed.

For approximately 5,000 salaried workers involved in eight settlements, increases were extremely varied. Two settlements resulted in fringe benefits only.

Some of the more significant settlements of the period were:

- Consolidated Edison Company of New York granted 7.5 cents per hour to 23,500 members of the Utility Workers Union of America, CIO, with an additional 5 cents per hour for employees with twenty-five or more years of continuous service.

- The Pennsylvania Railroad settled with 28,000 members of the CIO Railroad Workers of America for 5 cents per hour. The cost of living clause was discontinued, but 13 cents was frozen into the base rates. Vacation benefits were extended to three weeks after fifteen years of service.

- Bell Aircraft Corporation granted 5 cents per hour to 6,000 members of the United Auto Workers, CIO, and increased shift differentials, holiday, vacation and sick pay. Four thousand salaried employees received an increase of 2.4%.

- In the apparel industry, two associations settled with the International Ladies' Garment Workers' Union, AFL, granting no wage increases. They were the Industrial Council of Cloak, Suit and Skirt Manufacturers, settling with approximately 60,000 workers, and the Merchant Ladies Garment Association, settling with approximately 40,000 workers. Both agreed to raise the employers' contribution to the retirement fund. Both agreements involved manufacturing establishments in the New York City area.

VIRGINIA M. BOSCHEN
GRACE MEDVIN
JUDITH WISHNIA
Statistical Division

Management Book Shelf

Applied Imagination—The author of this book, who was cofounder of Batten, Barton, Durstine and Osborn, is an outstanding exponent of what he preaches. Mr. Osborn explains what creative imagination is and how it can be used effectively in a wide variety of undertakings. He discusses ways of developing creativity and illustrates his points with incidents from his own experience. This volume contributes to a field in which material has not been plentiful. It contains information for the manager or professional man who wishes to develop his skills in creative thinking and problem solving. *By Alex F. Osborn. Charles Scribner's Sons, New York, 1953, 317 pp. \$3.75.*

Significant Labor Statistics

Item	Unit	1954		1955				Year Ago	Percentage Change		
		Feb.	Jan.	Dec.	Nov.	Oct.	Sept.		Aug.	Latest Month over Previous Month	Latest Month over Year Ago
Consumer Price Indexes											
NICB) All Items ⁴	Jan. 1939=100	na	184.0	182.7	183.1	183.3	184.1	183.7	179.0	na	na
Food (b).....	Jan. 1939=100	na	231.2	228.3	230.0	231.1	234.4	234.0	228.7	na	na
Housing.....	Jan. 1939=100	na	136.1	135.2	134.9	134.5	133.1	132.5	128.8	na	na
Clothing.....	Jan. 1939=100	na	150.4	150.9	151.0	151.1	151.0	150.8	150.6	na	na
Men's.....	Jan. 1939=100	na	167.1	167.8	167.9	168.0	168.2	167.8	167.7	na	na
Women's.....	Jan. 1939=100	na	136.1	136.5	136.6	136.6	136.5	136.3	136.1	na	na
Fuel.....	Jan. 1939=100	na	142.1	140.7	140.6	140.4	140.0	139.7	140.8	na	na
Electricity.....	Jan. 1939=100	na	93.5	93.5	93.5	93.5	93.4	93.4	93.4	na	na
Gas.....	Jan. 1939=100	na	107.6	105.1	105.1	105.1	105.1	105.1	103.8	na	na
Housefurnishings.....	Jan. 1939=100	na	162.9	163.4	163.7	163.6	163.4	163.4	164.6	na	na
Sundries.....	Jan. 1939=100	na	184.7	184.3	183.8	183.7	183.5	183.3	175.0	na	na
Purchasing value of the dollar.....	Jan. 1939 dollars	na	54.3	54.7	54.6	54.6	54.3	54.4	55.9	na	na
(BLS) All Items.....	1947-1949=100	115.0	115.2	114.9	115.0	115.4	115.2	115.0	113.4	-0.2	+1.4
Employment Status ¹											
Civilian labor force.....	thousands	* 63,725	* 62,840	62,614	63,353	63,404	63,552	64,648	—(K)	+1.4	na
Employed.....	thousands	* 60,051	* 59,753	60,764	61,925	62,242	62,306	63,408	—	+0.5	na
Agriculture.....	thousands	* 5,697	* 5,284	5,438	6,651	7,159	7,262	7,274	—	+7.8	na
Nonagricultural industries.....	thousands	* 54,349	* 54,469	55,326	55,274	55,038	55,044	56,134	—	-0.2	na
Unemployed.....	thousands	* 3,671	* 3,087	1,850	1,428	1,162	1,246	1,240	—	+18.9	na
Age Earners ²											
Employees in nonagr'l establishm'ts.....	thousands	p 47,476	r 47,770	r 49,722	r 49,340	49,663	49,695	49,409	48,369	-0.6	-1.8
Manufacturing.....	thousands	p 16,027	r 16,177	r 16,488	r 16,706	17,017	17,221	17,258	17,013	-0.9	-5.8
Mining.....	thousands	p 782	r 792	809	r 816	813	826	831	856	-1.3	-8.6
Construction.....	thousands	p 2,240	r 2,251	r 2,521	r 2,674	2,772	2,751	2,715	2,280	-0.5	-1.8
Transportation and public utilities.....	thousands	p 4,118	r 4,137	r 4,240	r 4,273	4,310	4,323	4,337	4,210	-0.5	-2.2
Trade.....	thousands	p 10,297	r 10,386	r 11,310	r 10,772	10,611	10,464	10,334	10,214	-0.9	+0.8
Finance.....	thousands	p 2,062	r 2,054	2,064	2,056	2,055	2,054	2,076	1,977	+0.4	+4.3
Service.....	thousands	p 5,225	r 5,227	r 5,272	5,303	5,336	5,393	5,409	5,194	n	+0.6
Government.....	thousands	p 6,725	r 6,746	7,018	6,740	6,749	6,663	6,449	6,625	-0.3	+1.5
Production and related workers in manuf'g Employment											
All manufacturing.....	thousands	p 12,677	r 12,821	r 13,107	r 13,317	13,627	13,832	13,851	13,733	-1.1	-7.7
Durable.....	thousands	p 7,371	r 7,493	r 7,651	r 7,767	7,941	8,016	8,054	8,115	-1.6	-9.2
Nondurable.....	thousands	p 5,306	r 5,328	r 5,456	r 5,550	5,686	5,816	5,797	5,618	-0.4	-5.6
Average weekly hours											
All manufacturing.....	number	p 39.5	39.4	40.2	40.0	40.3	39.9	40.5	40.9	+0.3	-3.4
Durable.....	number	p 40.0	r 40.0	40.8	40.6	41.0	40.6	41.1	41.7	0	-4.1
Nondurable.....	number	p 38.9	38.5	39.3	39.1	39.2	38.9	39.6	39.8	+1.0	-2.3
Average hourly earnings											
All manufacturing.....	dollars	p 1.79	1.80	1.79	1.79	1.78	1.78	1.77	1.74	-0.6	+2.9
Durable.....	dollars	p 1.90	1.91	1.90	1.89	1.89	1.89	1.88	1.85	-0.5	+2.7
Nondurable.....	dollars	p 1.64	1.65	1.63	1.63	1.62	1.63	1.61	1.58	-0.6	+3.8
Average weekly earnings											
All manufacturing.....	dollars	p 70.71	70.92	71.96	71.60	71.73	71.02	71.69	71.17	-0.3	-0.6
Durable.....	dollars	p 76.00	r 76.40	77.52	76.73	77.49	76.73	77.27	77.15	-0.5	-1.5
Nondurable.....	dollars	p 63.80	r 63.53	64.06	63.73	63.50	63.41	63.76	62.88	+0.4	+1.5
Straight time hourly earnings											
All manufacturing.....	dollars	e 1.75	1.76	1.74	1.74	1.73	1.73	1.72	1.68	-0.6	+4.2
Durable.....	dollars	e 1.85	1.86	1.84	1.83	1.82	1.83	1.81	1.77	-0.5	+4.5
Nondurable.....	dollars	e 1.61	1.62	1.59	1.60	1.59	1.60	1.57	1.54	-0.6	+4.5
Turnover rates in manufacturing ³											
Separations.....	per 100 employees	p 3.6	r 4.3	4.0	4.2	4.5	5.2	4.8	3.7	-16.3	-2.7
Quits.....	per 100 employees	p 1.0	1.1	1.1	1.5	2.1	3.1	2.9	2.2	-9.1	-54.5
Discharges.....	per 100 employees	p 0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0	-50.0
Layoffs.....	per 100 employees	p 2.3	2.3	2.5	2.3	1.8	1.5	1.3	0.8	-17.9	+187.5
Accessions.....	per 100 employees	p 2.6	2.8	2.1	2.7	3.3	4.0	4.3	4.2	-7.1	-38.1

¹ Bureau of the Census

² Bureau of Labor Statistics

* The figures for January and February are a new series based on a revised sampling procedure. The old series has been discontinued. Figures for the previous months are still in the old series.

³ Food prices during the week of the fifteenth

e Estimated

n Less than .05

p Preliminary

r Revised

(K) Labor Force data for a year ago not comparable with the new series

na Not available

Vacation Allowance

(Continued from page 142)

straight forty-hour basis and will be prorated as follows, and applies to layoffs only. All vacation pay paid to employees shall not include night shift premium.

Seniority	Hours of Vacation Pay	Seniority	Hours of Vacation Pay
1 month	3.34	26 months	6.68
2	6.68	27	10.00
3	10.00	28	13.34
4	13.34	29	16.68
5	16.68	30	20.00
6	20.00	31	23.34
7	23.34	32	26.68
8	26.68	33	30.00
9	30.00	34	33.34
10	33.34	35	36.68
11	36.68	36	40.00
12	40.00	37	6.68
13	3.34	38	13.36
14	6.68	39	20.00
15	10.00	40	26.68
16	13.34	41	33.36
17	16.68	42	40.00
18	20.00	43	46.68
19	23.34	44	53.36
20	26.68	45	60.00
21	30.00	46	66.68
22	33.34	47	73.36
23	36.68	48	80.00
24	40.00	49	6.68
25	3.34	etc.	

"Sec. 4. The company agrees to recognize faithful service by providing an extended vacation plan whereby starting with eleven years' seniority, an extra day's paid vacation will be granted for each added year of service up to and including twenty-five years. The maximum paid vacation under this plan will be five weeks for twenty-five years or more service.

Seniority	Vacation
11 years	88 hours
12	96
13	104
14	112
15	120
16	128
17	136
18	144
19	152
20	160
21	168
22	176
23	184
24	192
25 or over	200"

(Electrical manufacturing company and IBEW-AFL)

Table 5: Methods of Computing One Week's Vacation Pay in 142 UE, IUE, and IBEW Contracts

	Total	UE-IND	IUE-CIO	IBEW-AFL
Total	142	59	47	36
Forty hours X:				
Straight-time rate	39	15 ¹	10 ⁶	14 ⁹
Average hourly earnings	21	10	7	4
Average straight-time earnings	3	2	1	0
Average weekly hours X:				
Straight-time rate	24	9 ³	11	4 ⁷
Average hourly earnings	7	5	2	0
Average straight-time earnings	3	1	1	1
Scheduled weekly hours X:				
Straight-time rate	13	2	3	8
Average hourly earnings	1	1	0	0
Average straight-time earnings	2	0	2	0
2% of:				
Gross annual earnings	20	9	8	3 ⁵
Annual straight-time earnings	4	2 ²	0	2
Graduated pay plan				
44 hours pay for 1 year	1	1	0	0
59 hours pay for 2 years				
74 hours pay for 3 years				
90 hours pay for 4 years				
Average weekly earnings for specified period	4	2 ⁴	2	0

1. In one contract employees who work forty-four hours or more receive average hours X straight time; one contract adds average overtime in February, March and April of current year to rate.
2. In one contract employees with fifteen years of service receive 120 hours X straight time.
3. One contract provides 2½% of straight-time earnings.
4. One contract provides for average weekly hours for thirteen weeks preceding vacation or forty hours X straight time, whichever higher.
5. One contract provides forty times hourly rate or 2% of gross annual earnings, whichever higher.
6. One contract provides forty times straight time or 2% of straight-time earnings, whichever higher.
7. One contract provides average weekly hours times regular rate or average straight-time rate, whichever higher.
8. One contract provides for a one-week shutdown and pays 2½% for one to three years, 3¼% for three to five years, 4¼% for five to fifteen years and 6¼% for fifteen years.

COMPUTING ONE WEEK'S VACATION PAY

The method most used by the three unions to compute the pay an employee receives for one week's vacation is to multiply forty hours by his straight-time rate. This method appears in thirty-nine contracts of the three unions, but is used most extensively by the IBEW-AFL. Nearly one half of the IBEW contracts (fourteen of thirty-six) utilize this method of computing vacation pay as compared to one out of five IUE-CIO contracts and one out of four UE contracts.

Another prevalent method used by the three unions for computing an employee's pay for one week of vacation is by multiplying his average weekly hours times his straight-time rate. This method will result in higher vacation pay for employees in those years in which they put in a great deal of overtime. Twenty-four contracts of the three unions incorporate this method of vacation pay computation but it is used most fre-

quently by the IUE-CIO. Under eleven of the forty-seven IUE contracts, vacation pay is computed in this way as compared to nine of fifty-nine UE contracts and four of thirty-six IBEW contracts.

Other methods frequently used by the three unions to compute one week's vacation pay are: multiply forty hours by average hourly earnings (twenty-one contracts); compute 2% of gross annual earnings (twenty contracts). (See Table 5.)

PAY IN LIEU OF VACATION

The IUE-CIO and the IBEW-AFL follow identical patterns in their provisions for pay in lieu of vacations. Two out of five contracts of both unions have no clause dealing with this practice. Slightly more than two out of five contracts of both unions permit employees to receive pay in lieu of taking time off,

while one out of six specifically forbids this practice. (See Table 6.)

More than half of the UE contracts studied have no clause dealing with pay to employees in lieu of time off for vacation. Two out of five companies with UE contracts permit employees to receive their vacation pay allowance in lieu of taking time off, while less than one out of ten forbids this practice.

SHUTDOWN VACATIONS

The three unions follow similar patterns with respect to shutdown vacations. About half of the contracts studied have provisions which permit the companies to shut down their plants during the vacation period, while the other half have no provisions dealing with shutdown vacations.

A greater proportion of the IBEW-AFL contracts

Table 6: Provisions for Pay in Lieu of Vacation in 142 UE, IUE, and IBEW Contracts

	Total		UE-IND		IUE-CIO		IBEW-AFL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total	142	100.0	59	100.0	47	100.0	36	100.0
Pay in lieu of vacation permitted:	60	42.2	23	39.0	21	44.7	16	44.4
Company option	9	6.3	0	0	4	8.5	5	13.9
Company request plus union consent	3	2.1	1	1.7	0	0	2 ^a	5.6
Company request plus employee's and union's consent	1	.7	0	0	1	2.1	0	0
Company and employee agree	1	.7	1	1.7	0	0	0	0
By government order	1	.7	0	0	1	2.1	0	0
Employee's request	2	1.4	1	1.7	1 ^a	2.1	0	0
Other	7	4.9	2 ¹	3.4	3 ^a	6.4	2 ^a	5.6
Circumstance not stated	36	25.4	18 ^a	30.5	11	23.4	7	19.4
Pay in lieu of vacation not permitted	18	12.7	4	6.8	8	17.0	6	16.7
No provision for pay in lieu of vacation	64	45.1	32	54.2	18	38.3	14	38.9

1. One contract provides that if employee is prevented from taking vacation for reason such as illness, layoff, etc., he may receive pay in lieu of his vacation; one contract provides that eligible employees may take pay in lieu of third week of vacation at employer's option.
2. One contract provides that all employees receive vacation checks at the same time regardless of when or whether they take vacation.
3. One contract provides for approval by company and shop committee.
4. One contract provides that those entitled to three weeks vacation who haven't taken third week by December 13 may take one week's pay in lieu of third week of vacation; one contract provides for pay in lieu of vacation only for time above two weeks allowed to employees with over ten years of service at discretion of employer; one contract provides that if an employee is entitled to more than one week, he may take only one week and receive pay for additional time if approved by foreman.
5. One contract provides for pay in lieu of vacation only in emergency sanctioned by superintendent and union.
6. One contract provides that company may elect to pay for third week of vacation rather than allow time off; one contract provides that pay in lieu of third week of vacation is allowed.

Table 7: Shutdown Vacation Provisions in 142 UE, IUE, and IBEW Contracts

	Total				UE-IND.				IUE-CIO				IBEW-AFL			
	Companies Num- ber	Per Cent	Workers Number	Per Cent	Companies Num- ber	Per Cent	Workers Number	Per Cent	Companies Num- ber	Per Cent	Workers Number	Per Cent	Companies Num- ber	Per Cent	Workers Number	Per Cent
Total	142	100.0	357,627	100.0	59	100.0	126,660	100.0	47	100.0	196,728	100.0	36	100.0	34,239	100.0
Shutdown vacation provided for or permitted	70	49.3	287,190	80.3	30	50.8	104,329	82.4	25	53.2	164,714	83.7	15	41.7	18,147	53.0
No provision for shutdown vacation	72	50.7	70,437	19.7	29	49.2	22,331	17.6	22	46.8	32,014	16.3	21	58.3	16,092	47.0

have no clauses permitting shutdown vacations than the contracts of either of the other two unions. Of the IBEW contracts, 58% have no such clause. This compares to 47% of the IUE contracts and 49% of the UE contracts with no vacation shutdown clauses. (See Table 7.)

JAMES J. BAMBRICK, JR.

HERMINE ZAGAT

Division of Personnel Administration

Noise Round Table

(Continued from page 147)

We are one of the highest-benefit-paying states in the union. Presently our temporary rate is 70% of \$60, or \$42, so you can readily see that the total would amount to about \$12,000 for loss of hearing in both ears. The average of the rest of the states in the union is around \$3,000. I think New York is \$3,500 or \$4,000.

When that law was put on the books, it was the feeling of the legislature and the advisory committee of industry and union representatives, which we have in Wisconsin, that the law definitely implied that the fifty weeks and the 333½ weeks should be paid for an accidental injury—even though this was not made clear in the language. Nobody gave consideration to loss of hearing from industrial noises until three or four years ago.

It was agreed by insurance people, by employers, and by the industrial commission, to have a test case in Wisconsin. That case was Wojcik v. Green Bay Drop Forge Company. Many of the facts were stipulated. It was assumed that in his work place there were between 120 and 130 decibels of sound and that it was continuous and repetitive. He was a man sixty years of age. He had worked for that company for approximately seven years. He, of course, had not had an audiometer test in a pre-employment physical examination. The commission doctors found one ear to be some 30% deficient, the other one was off some 18%. Then they adopted a formula. In our state we take off 2.5% of an award for each year over fifty. With Wojcik's case, that meant ten times 2.5% or 25%. Then the commission carefully considered all of the other elements and picked another offset of 25%, with some logic but some guesswork as well.

The industrial commission made its award in favor of the worker. The case was appealed by the employer's carrier to the Dane County circuit court. The judge reversed the commission and said that the two necessary elements were not present and, therefore, no award should have been granted.

The claimant and the commission appealed the case to the Supreme Court. That court, in a six-to-one decision, reversed the lower court.

I want to read to you—because I think it points up some of the legal problems here—the dissent of Justice Gehl of our Supreme Court. First he denotes the statute on time of injury:

"In case of disease it is the last day of work for the last employer whose employment caused disability.

"There is nothing ambiguous or indefinite in the definition. There has been no last day of work in this case. At the time of the hearing before the commission, claimant was still employed at the same employment and without wage loss. [I may add he is still there.] The commission found it necessary to define a term which is as clear and definite as one can be made and applied an arbitrary definition which is completely at variance with that of the statute. Had the commission defined the last day of work as the preceding Christmas Day, for example, would we give the definition our blessing? [I think Justice Gehl in a subtle way was accusing his brethren of the court of being Santa Claus.] The choice made by the commission bears as little resemblance to the statutory definition as that which I suggest as a possibility. I am unable to read out of any of the statutory provisions the authority or need for the commission's construction. Nor do I find in any of the cases cited by the majority any suggestion that its construction be permitted, to say nothing of its being required.

"A feeling of sympathy for the claimant and others similarly situated might, if there were no other means of affording them what appears to be merited relief, entice one to concede to the commission the right to supply what it believes to be an omission in the statutes. Even under those circumstances we should not recognize the power. There is, however, a means to supply the relief and the omission, and that is by the act of the legislature whose exclusive function is to amend the statute. The commission did not give construction to an ambiguous statutory definition. It sought to amend it by inserting one which cannot even by implication be read out of it.

"Because I am unable to agree that it is the province of the court or an administrative agency to legislate, I respectfully dissent."

Following the court decision, fifteen Wisconsin companies, aroused at that decision, filed briefs as amici curiae. Our Supreme Court handed down its decision on the motion for rehearing the latter part of December and did not reverse itself, although Justice Fairchild, who is now the chief justice as of January 1, joined Justice Gehl in the dissent.

For the first time the constitutionality question was raised in a very thorough method, but the court declined to pass on that because it had not been brought to the lower court's attention, which is the rule of Wisconsin. Some of the briefs on the rehearing also sought to have the court make some kind of a definition as to the application of a new statute.

While all this was pending and the Wojcik case was still before the commission, we began our meetings of the advisory committee in Wisconsin. On this committee are five representatives from industry, three

from the AFL, three from the CIO, one representing stock insurance companies and one representing mutual insurance companies. The insurance men do not have a vote but are helpful on procedure problems.

We meet for six or eight months previous to each session of our legislature, which meets biennially, and try to iron out an agreed bill. I think we are one of the few states in the country that has such an advisory committee. The committee has been functioning now for about thirty years. I have served on it for the last nine years as an industry representative. Sometimes we are criticized by some of our own members for being too generous. Sometimes we are criticized by friends in the legislature who say that we are arrogating to ourselves legislative power, because we always have a gentlemen's agreement.

It has been adhered to, I might add, that that packaged bill is the bill which industry, labor, and the carriers will support before the legislature. I tell the men in the legislature who complain that they can go back to the old system if they like. They can have extensive committee hearings and we will do our share of lobbying. We will bring our witnesses as the other people do, and they can have the long, drawn-out procedure. That usually puts the quietus on the objections of the legislators.



We had in our agreed bill a year ago what is definitely considered stopgap legislation. First, we added to the language in the old statute that I alluded to earlier, that the fifty weeks and the 333½ weeks must be from an accidental or traumatic cause—an explosion or blow on the head, something of that sort—which occasioned the loss of hearing. Then we incorporated into what is called our nondisabling silicosis statute similar language for nondisabling loss of hearing. For the nondisabling, however, the commission has to find out whether at first there was a quit or a termination of employment, or a transfer, and loss of wage. Then the commission on its discretion can award up to but not exceeding \$3,500. That can be done through a series of interlocutory orders or it can be done all at once. It has worked very well in silicosis. In fact, there are so few cases of silicosis now that it does not mean very much.

We have been criticized by the labor unions for fostering that legislation, although they are a party to it and agreed with us at the time it was passed. So we are considering now what to do when our session meets again in 1955. The commission has followed Miss Donlon's excellent idea, and last week appointed a committee of five outstanding doctors to study this problem and to report back to us on the advisory committee as to their findings so that we may consider them in adopting legislation next year.

For the last three years the Wisconsin Manufac-

turers' Association has been advocating the use of audiometer tests in pre-employment physical examinations. To my knowledge, however, that campaign has not been successful. There are too many people in industry who think this problem does not affect them. Yet some doctors point out that someone who has very sensitive hair cells may find difficulty even with eighty or ninety decibels—or approximately four typewriters pounding at one time. The Allis-Chalmers Manufacturing Company has made pre-employment tests for a long time and is finding that 25% of the people who are applying for jobs have some loss-of-hearing defect.

A pre-employment examination is at least a starting point. A person may be 20% defective in hearing when he is hired and ten years later, due either to noisy environment or some other cause, may be 35% defective in hearing. His employer will know, at least, that he is not responsible for the first 20%.

In addition to urging pre-employment tests, the Wisconsin Manufacturers' Association has been conducting meetings in some Wisconsin cities. These are in connection with conferences of the Wisconsin Council of Safety. Physicians have spoken on the anatomical and physiological aspects of hearing, and on the medical aspects of industrial noise. The safety people themselves engaged in a panel as to what they could do. We had men speak on technical aspects of noise, on the legal aspects of it, and on the use of protective devices. A total of 3,300 persons have attended these meetings in six cities.

The problem finally resolves itself to a question of legislative action. All of you would be wise talking to people in your own state legislative houses about this problem. Give them all the information you can, because even though you do not have a statute now, you can be very certain that within the next year or two, as state legislatures begin to meet, the union organizations of this country are going to foster legislation of that kind.

Ear Damage from Sound, and the Role of the Subcommittee on Noise in Industry

— by Stacy R. Guild —

NOISE DEAFNESS is not something new, although widespread interest in the topic is a recent development. The clinical condition has long been known under such names as boilermakers' deafness, locomotive drivers' deafness, etc.

The damage done to the ear by prolonged habitual exposure to loud noises has also long been known. In

1890 an otologist named Haberman, at Prague, reported on the microscopic examination of the ears of an elderly man known to have had a typical boiler-makers' deafness. The changes from normal that he observed, and which other investigators since then have repeatedly found, are always subject to the often plausible explanation that they were caused by some condition other than the noisy environment.



The first to make the therefore needed crucial experiment with animals was Wittmaack, a German otologist then at Greifswald. In 1907 he reported the changes that occurred in the ears of guinea pigs that had been kept for a long time under conditions of noise, simulating those in which boiler-makers worked. The animals were housed in a piece of large diameter iron water pipe, the outer surface of which was pounded by mechanically driven hammers. During the next few years, several European investigators also studied, by various experimental procedures, the effects of loud sounds on the ears of animals. All found the damage to be in the special part of the inner ear known as the organ of Corti. And this has been the essential finding, down to the present, of every serious student, no matter what the sound used.¹

The organ of Corti, which is the part of the ear that is damaged by sound of high intensity, is in the deep, or inner ear, a portion of the base of the skull, in the cavity of the snail-shell shaped region of the bone known as the cochlea. The length of the organ of Corti, measured around the curves of the cochlear spiral, is about one and a quarter inches; its width is only about a two hundredth of an inch. Along this extremely narrow curved structure are the endings of the approximately 30,000 nerve fibers of the nerve of hearing. These nerve fibers end around the very tiny structures of the organ of Corti known as hair cells. The fact that the nerve fibers end at the hair cells shows that the hair cells are essential for the perception of sound, no matter which of the several theories of the physiology of hearing may prove correct.

Sound reaches the hair cells of the organ of Corti by passing, in accord with the physical laws of acoustics, through the ear canal, the drum membrane, the chain of three little bones in the middle ear, and the fluids of the cavities of the inner ear. Nerve impulses are set up in some as yet unknown way by the effect

of the physical sound waves on the hair cells. If some or all of the hair cells that normally would be affected by a given sound are not present, the hearing of that sound is impaired.

The above stated items bear on the problems of occupational deafness because intense sounds can destroy hair cells of the organ of Corti, and also because regeneration of hair cells does not occur. Observed injuries range from the loss of only a few scattered hair cells of one region to complete destruction over a considerable portion of the entire length of the cochlea of all hair cells and of the other parts of the organ of Corti. Such injuries are irreversible; spontaneous replacement of hair cells does not occur and they cannot be restored by any known method of treatment. Prevention of injury to the organ of Corti is therefore the logical approach to the basic problem.

The request was made that in addition to telling about the damage that may be done to an ear by sound something be said about the Subcommittee on Noise in Industry. This group is an outgrowth of the interest in preventive medicine of the world's largest organization (over 4,500 members) of eye, ear, nose and throat specialists, the American Academy of Ophthalmology and Otolaryngology. For over two decades, the academy has had a committee on the conservation of hearing.

In the earlier years its efforts were concentrated on the prevention of deafness in children. Late in 1946, after discussion in the larger group of the growing importance of occupational deafness, a subcommittee of three (of which the speaker was one) was appointed to consider what could be done to help prevent this form of impaired hearing. The Subcommittee on Noise in Industry now has six members. At no time have any of us received any compensation for the time put into the work. We have no axe to grind for industry or for labor. From the start, our interest has been the conservation of hearing; in other words, the prevention of deafness. We have attempted, to the extent that we have knowledge, to educate any and all persons concerned with the problems of noise deafness, and we have tried by research studies to get answers to some of the unsolved problems. We have assisted in getting programs for the prevention of deafness organized in industrial plants. The assisting has been chiefly from the standpoint of getting research data, and we are very frank about it. When we go into a plant, we want to get data that will help answer, for everyone, some of the questions that are still unanswered, in quantitative terms.

Within a year of its organization the subcommittee felt the need of a field worker. We wanted and found a person who is not an "ivory tower" student, away from the practical problems, and thinking only in laboratory terms. The man we found had worked in a factory several years before going to college and

¹ The talks by Dr. Guild and Mr. Rosenblith were accompanied by slides. They have accordingly been slightly revised for publication. Dr. Guild used slides to show the location of the organ of Corti and the nature of the damage caused to it by intense sound. Some of the pictures shown were from animal ears, some were from microscopic preparations of human ears. For the animal ears, the pictures shown can be found in the 1919 paper by Guild in volume 4 of the *Journal of Laboratory and Clinical Medicine*; for the human ears, the pictures shown can be found in the 1934 paper by Crowe, Guild and Polvogt in volume 54 of the *Bulletin of the Johns Hopkins Hospital*.

had later earned a doctor of philosophy degree at the University of Iowa in physics and psychology, and had worked in the department of otolaryngology on problems of hearing and deafness. This is the sixth year in which he has been our full-time field representative, and I suggest you contact him when you have questions on noise problems. His address is: Dr. Douglas Wheeler, 1136 West Sixth Street, Los Angeles 17, California.

In studies of noise deafness it is necessary, for reliable data, to rule out other conditions that might be the cause of impaired hearing in individuals. Therefore, for some time the subcommittee has wished to have a clinical otologist specially interested in this work to devote more time to the research studies than the individual members of the group can. Last November we obtained the services of Dr. Aram Glorig, who has taken a year off from his work with the Veterans Administration.

The subcommittee has from the beginning stressed the need for carefully conducted field studies in actual industrial situations. Satisfactory answers to some of the most important practical questions about occupational deafness cannot be given by anyone on the basis of laboratory experiments with animals. The actions of man, unlike those of animals, cannot be controlled by an investigator. Employers may change the machinery and thus the noise situation; workmen may change employment, go hunting or trap shooting or be near other noises when not at work. A further complication in the determination of the effect of a particular industrial noise on hearing is the possibility that the impaired hearing of some of the men who have been exposed to it may be due in part, or entirely, to this, that, or another disease quite unrelated to the employment. Everyone seriously interested in the topic realizes the complexity of the problems and the need for many more carefully conducted field studies. In this aspect of our activities it is quite possible that many of the members of this audience can be of real assistance to the Subcommittee on Noise in Industry and to the accomplishment of its broad objective—the conservation of hearing.

Setting Standards—Problems Involved

by Walter A. Rosenblith

MY INTEREST in this whole field of hearing stems from the fact that I was faced with the actual noise problems of 4,000 boilermakers, riveters, and machinists in the French state-owned railroad yards in Rouen in the year 1937. It was my job to

find out if there was a relationship between noise and hearing loss. My interest has carried me from there a long way to the Massachusetts Institute of Technology. Today I am looking at this problem of setting noise standards as a member of a committee of the American Standards Association. But permit me to say that the opinions expressed here are my own and not necessarily those of Committee Z24-X-2.

Our subcommittee was formed upon the suggestion of Sectional Committee Z-24, which is sponsored by the Acoustical Society of America. The members of the subcommittee came from all the fields that could possibly contribute to the solution of such a problem. We had medical people and in particular representatives of the committee of which Dr. Guild has just spoken. We had technical people—physicists and engineers. We also had human engineers. We had bio- and psycho-acousticians and industrial hygienists. This booklet, "The Relations of Hearing Loss to Noise Exposures," is the report of the committee of which I was the chairman for the past year and a half.

Our committee's task was an exploratory one.

We went out to American industry and we asked: "Do you have data that would help us illuminate the problem area that is involved in the relations of hearing loss to noise exposure?" We hired a technical counsel who traveled around this country. He came back with 7,000 audiograms. Seven thousand audiograms is not a large number in view of the number of people who are exposed to serious noise hazards, but the 7,000 he picked had already been put through a selective process. He had to be satisfied that they represented serious audiograms, and that at the same time there were available good measures of the exposure noise experienced by the particular individuals whose audiograms we had.

The committee approached the problem of noise standards from the point of view of what happens to an exposed group on the average, instead of what happens to any individual. The medical practitioner assumes responsibility for the well-being of the individual; we looked at the problem of possible noise standards as one in vital statistics—vital statistics of hearing, that is. We felt that we should not even attempt to come up with answers for any given individual. When faced with a single audiogram and not much else, few would want to affirm with certainty "All the loss this man has was caused by his exposure to such and such an industrial noise." We are clearly not at a stage where one can establish firm causal relations, but rather where one might attempt to show that a certain correlation is reasonable and probable. We attempted to assess the risk for groups of people exposed to noise to the extent that their hearing would be significantly worse than normal hearing.

When you ask the question, "What is normal hearing?" you have to specify: normal hearing for whom? For a group of youngsters in high school, or for a group of people like Wojcik and others who file claims at age sixty?

The first step we took was to consider the question, how does hearing change with age? Three big surveys have been made in the United States. One was made by Bunch in the late Twenties and the early Thirties; one by the Bell Laboratories during the 1939 World's Fair; and one by the Navy Electronics Laboratory at the San Diego County Fair in 1946. We pooled the data, and plotted average hearing loss in decibels vs. age in years for 500, 1,000, 2,000, 3,000, and 4,000 cycles. The data represent the average hearing loss of an unselected male population—i.e., of men who walked up to a booth and said, "I would like to take a hearing test."

Plotting these data yielded results such as these. At fifty-five years, the average hearing loss for males is of the order of fifteen decibels for 2,000 cycles, while at 4,000 cycles the loss is about twenty-five decibels.

Once we had these curves (and similar presbycusis curves for women) we asked: If we now go out into industry and obtain hearing loss data, is it fair or is it scientifically reasonable that we should deal with these hearing losses as such? Rather, shouldn't one take these so-called gross hearing losses and correct them for the losses that could be reasonably expected to exist in the absence of noise exposure for the age group in question?

In other words, if a group of men (of average age fifty-five) had an average gross hearing loss of thirty decibels at 2,000 cycles per second, one might say that fifteen out of the thirty decibels represent the average loss that would normally be found in such a group of men on the basis of age. The net loss is thus fifteen decibels. Our curves plot, therefore, net hearing loss (i.e., gross hearing loss minus presbycusis correction) vs. years of exposure to noise.

On the basis of studies carried on in a big factory in the Midwest, we had data on people who had been exposed to many different kinds of noises for a wide range of exposure periods. Based on these data and other considerations, the committee drew so-called trend curves. These trend curves are at present our best guess as to how much average net hearing loss a group of people will suffer when exposed to a given amount of steady noise—continuously for a certain period of time.

Let me now say something about noise. There are all sorts of noises and all sorts of levels. We feel very strongly that the single number describing the overall level of the noise does not help much in predicting

the effect of this noise upon hearing. I think that as long as you are after this single number, you are going to be in trouble. Let us take two different noises, both having an over-all level of 105 decibels. One of them may have no effect whatsoever and another may seriously affect the hearing of a large group of the population. We suggest, therefore, that wherever possible noise be analyzed. This means that one determines the intensity of the noise in the various octave bands.

Let us now consider the average kind of effect expected at 2,000 cycles for various exposure times in years and for various octave band levels. The report's trend curves indicate that knowledge of the noise in the octave from 300 to 600 cycles per second is most useful in estimating hearing loss at 2,000 cycles. This may seem strange to you, but you will have to read the report if you want to know how we arrived at this concept of the *sorting octave*. If we have an eighty decibel level in this particular octave, there is no net hearing loss at 2,000 cycles per second for exposure times up to seven years. Whatever losses the groups of people we studied had were entirely accounted for by presbycusis. However, if the level goes up to eighty-eight decibels in this (300-600 cycles per second) octave, an average net loss of about ten decibels in ten years may be expected. If the octave band level goes up to ninety-five decibels, something like twenty decibels net hearing loss after thirty years of exposure may be expected.

How different is the situation at different frequencies? Let us look at what happens at 4,000 cycles. For thirty years of exposure at eighty-eight decibels (in the octave of 1,200 to 2,400 cycles) the trend curves show an average net loss of thirty-three decibels. This is in addition to the average loss a group of people would show because of presbycusis (i.e., hearing loss due to age).

The trend curves apply at present only to continuous exposure to steady noise and to noises of a composition carefully specified in the report. Continuous exposure means something approximating eight hours a day, five days a week, and fifty weeks a year.

As you can see, time of exposure makes a very definite difference. What you get as a net loss after six months of exposure is not at all the same as what you will get after thirty years. If one wants to set standards or criteria, one will have to specify the periods of employment during which the people will be exposed to noise.

You may be under the impression that this thirty-three decibel net hearing loss at 4,000 cycles per second represents a very serious situation. It represents a very serious situation at 4,000 cycles. The question

arises, however, as to how important 4,000 cycles is in the life of the man. Hearing losses come in all sizes. A man can have quite a little hearing loss (especially in the higher frequencies) and still understand his fellow citizen quite well. Hence we feel that it is important to ask what we are trying to protect against. Are we trying to protect against hearing loss at 4,000 cycles or at 6,000 cycles? Or are we trying to protect something like a more generalized ability of man, such as his ability to understand speech? Or are we trying to protect a man in terms of his ability to earn a living wage?

The answers to these questions are obviously not at all the same, and you can, therefore, not expect that the same criteria or standards can be drawn if you are going to set different kinds of protective goals.

Let us now consider a situation other than steady noises and continuous exposures. Here is a little illustration of what happens in the case of drop forgers.

In this case we have plotted threshold shifts (in decibels) instead of net hearing losses. We are not talking about thirty years, or twenty years, but about a two-year period. The people who gave us the data knew what the hearing of the thirty-five drop forgers was at the beginning of this exposure period, and they made measurements for intervals shorter than two years.

In two years, the drop forgers lost about twenty decibels at 4,000 cycles and about fifteen decibels at 2,000 cycles. Even at 1,000 cycles they lost a little more than ten decibels.

This is a serious matter. Sound level meters do not measure noises from drop forges very well. The pointer of the level meter is not fast enough to get up to the peak of the sound pressure created when the hammer drops. It would, therefore, not be too meaningful to put any number from a sound level meter on this graph.

American industry does not deal only with steady noises or only with the drop forge variety of noise. Our committee has, therefore, looked at such questions as: What about intermittent exposure to steady noise? And intermittent exposure to riveting or jet plane noise? What happens when people wear ear protection? Let me just tell you that in conditions of intermittent exposure to jet plane noise, we found that if a good ear protection program is followed, exposure for as long as five or six years does not result in really significant shifts.

That much for some of the highlights of the report. There is not time now to go into the important questions of temporary threshold shifts and recovery. Our booklet has some information on this important topic.

At the present time the best we can give you are not criteria or standards but evaluated raw materials. To you as responsible people in a particular industry with a particular noise problem, I would say, "If the

shoe fits you acoustically, you might put it on." At least try it for size. You might see if the report helps you to predict something as far as your situation is concerned. The committee used those trend curves in order to predict what might happen in various situations and compared them with actual results. The results are at least within the ball park.

My personal feeling is that nobody will be able to set forth ideal or perfect standards in the next decade. Before anyone can get some standards down on paper, he will have to know whom the standards are to protect and to what extent they should protect man's hearing. What kind of hearing loss is going to be judged objectionable? What percentage of the population are we trying to protect? Fifty per cent? Ninety-nine per cent? What risk are we willing to consider reasonable?

Before anybody is going to write standards, he will also have to specify how he is going to measure exposure for the various kinds of noises. These are some of the problems that are involved in setting standards in this area. But there is no reason for despair. A good deal of spade work has already been done and meetings such as this should help us to make progress.

If you gentlemen are going to have an open mind about this matter, if you are really going to help us to get the data that are necessary to fill our gaps, then maybe five years from now you and I will be talking not about ideal criteria and ideal standards but about real ones.

Discussion

QUESTION: We have employed men in the ship-building industry for twenty-five or thirty years, men who were subjected, of course, to the general noise of riveting, chipping, hammering, and so on. After twenty-five years of service they are eligible for retirement. Suppose that a worker comes up for examination and he has 60% or 70% loss of hearing after his twenty-five or thirty years. Would there be some measure or method by which we could determine, if it were possible under the laws of Maryland, whether that man would be entitled to some disability for loss of hearing under the federal statute, such as in New York where it is recognized as an occupational disease rather than an injury?

MISS DONLON: I cannot speak for the Federal Government or Maryland, but let me see if I can get the problem as I think it would be under the laws of the State of New York. If the man, under our law, could demonstrate that he had suffered hearing loss from an injuriously noisy work exposure; and if the standards which we are now operating under that

were laid down by the committee were met so that we could measure the amount of the loss, and it had become permanent (our test for that is six months' separation from the noise or work exposure), then he would be entitled to the appropriate schedule.

In New York, and I think is true for federal purposes, the compensation that he would get is not earnings that would prevent his receiving Social Security.

QUESTION: Mr. Ewens, do you not have a provision in the Wisconsin law that if the employer furnishes protective devices and the man refuses to wear them, it cuts down the amount of his award?

MR. EWENS: Yes. It works both ways. We have a provision in our statute which says that the award can be reduced in the amount of 15% if a worker refuses to use safety equipment, and likewise the employer may be penalized 15% if he has not provided the necessary safeguards under industrial commission orders.

QUESTION: How can we obtain Mr. Rosenblith's committee report?

MR. ROSENBLITH: Write to the American Standards Association, 70 East Forty-fifth Street, New York 17, N. Y. The title is: "The Relations of Hearing Loss to Noise Exposure."

QUESTION: Dr. Guild, I would like to know the reason for the answer to question number five made in your committee's report to Miss Donlon. The question refers to the value of a hearing aid in reducing compensable loss. And the answer states: "Your committee recommends that, in the making of a compensation award for occupational deafness, no consideration be given to the question of whether or not the ability of a claimant to understand speech is improved by the use of a hearing aid."

DR. GUILD: The reason is not medical. It takes serious work to rehabilitate with hearing aids. Ordinarily it takes a year to three years before a person is getting the full benefit of a hearing aid—except for the very occasional individual. The voice heard through a hearing aid does not sound like the voice the hard-of-hearing person has been getting through his defective hearing by someone speaking close to him.

In pure conductive deafness, that is not the case, but in nerve deafness it is, and impaired hearing due to noise is a form of nerve deafness.

Another practical reason is that so long as the claimant is going to get more financial compensation if he is not going to get correction, he may not make much effort to get correction until the matter of the cash is settled.

The third consideration I am not really qualified to speak upon, but our group was informed from various sources that it is reasonably well established (at least in cases of things like artificial legs, artificial

hands, and so forth) that prosthetic devices, their use, and what they restore, are not taken into account in the making of awards.

All those things were in our minds. This answer does not say that a hearing aid does no good.

QUESTION: Suppose we soundproofed our industry well below the hazardous level; does the panel feel it is still necessary to do all of these extensive pre-employment and periodic audiometric tests?

DR. GUILD: The damage to hearing occurs where the noise levels, irrespective of their composition, interfere seriously with the understanding of speech. If two people with normal or reasonably normal hearing cannot converse with each other at the ordinary distance walking along at half to an arm's length, there should be some study made. If they can converse—and that would be my criterion at the present status of knowledge—even though they have raised their voices as they walk, I do not think you need to worry.

But we have found in our subcommittees some situations where there was deafness among personnel working at levels of seventy-five decibels or thereabouts, and we found much more noise than that in places. They claimed they worked in an office with only a few typewriters around. But they went on errands throughout the plant—the drop forge and other parts of the plant—from time to time and were exposed. I think that becomes a problem. It may be necessary to have an off-limits place for most of the plant. If persons go through those noisy parts of the plant, they may have to use protective devices.

QUESTION: What are the average high and low cycle levels of the human voice?

MR. ROSENBLITH: Measurements that the Bell Telephone Laboratories have made indicate that at a distance of about three feet, the average level shown by a sound level meter would be about sixty-six to sixty-nine decibels. If I strained my voice considerably, I could probably get up to about ninety decibels. From this over-all level we would have to go to so-called octave band levels, i.e., to a description of the acoustic energy in each octave. We should also not forget that between the peaks of speech power, i.e., the strongest vowels and the weakest consonants (like "f" and "th"), there is a range of about thirty decibels.

In terms of frequency, the effective range lies between 125 and 7,000 cycles per second. But what is necessary for the understanding of speech may be considerably less than that.

QUESTION: If a drop forger who at the end of two years found himself in a bad hearing state persisted in that employment, would the result be complete deafness? Or does he reach a point where he acquires what might be called immunity?

MR. ROSENBLITH: The data we present in the report cover thirty-five drop forgers. The group was

large enough so we could divide it into those whose initial losses were appreciable and those whose initial losses were small. We found no significant difference between the amount that these two groups lost on the average. In other words, the fact that the one group had a loss to begin with did not give them protection or did it produce increased threshold shifts. This obviously can go for only so long. Man's hearing loss reaches something like a ceiling. In this particular plant I have seen audiograms of drop forgers exhibiting gross losses up to seventy or seventy-five decibels at the higher frequencies.

QUESTION: In this matter of recovery, how much room is there for malingering on the part of the person being tested? What objective methods are available to measure hearing ability? Suppose I want you to conclude my hearing is impaired? Can I cloud your reading of the instruments by my attitude?

DR. GUILD: I think as this topic develops into use and we come really to settling claims, the problem of malingering is going to be the toughest problem of all. There is no machine-like way to prevent malingering. You have to be familiar with what is a type pattern. Those of us who have been at this a long while know that certain kinds of findings do not go together. You do not get this or that; you do a run of tests.

Our Subcommittee on Noise in Industry, like every group that has been concerned with it, has urged pre-employment and routine re-examinations by air conduction audiograms. They have been done very satisfactorily. Malingering never gives you better hearing than a person has. An experienced specialist in hearing, the otologist, has to use all the tricks he has to work out the problem of impaired hearing and malingering. Some malingering is conscious; some is unconscious. Some of it is not understanding the directions. I am quite sure persons cannot consistently malingering over a period of three months or so.

I would like to read a section of the report our committee made to Miss Donlon. We had in mind, although we did not say so, the malingering factor: "The committee further recommends that no settlement of a claim be made unless the hearing loss has become stabilized"—we are thinking of the temporary element—"and believes that, if hearing has changed since cessation of exposure to noise, determination of stabilization should be based on a minimum of three examinations made at least one month apart." That would be irrespective of six months or three months or a weekend or what may turn out to be necessary or the honest observers.

I don't believe that a man can remember the various tests a professional otologist uses, and remember where he faked everything so that he can be consistent. If he is not going to get his claim settled until he is consistent for three times, we are going to whip it that way. But I do not see any easy way.

QUESTION: Can ruptured hair cells be caused by anything other than noise? And can you differentiate between hearing loss due to that cause and all others without performing an autopsy?

DR. GUILD: Even when you have performed the autopsy, you do not know whether that is what caused the loss. The organ of Corti is exceedingly delicate. It has to be to perceive and start up nerve impulses when acted on by the small amount of energy that is at the threshold of hearing. You can get those atrophies from toxic conditions, from diseases caused by bacteria, viruses, etc. A failure of the circulation and physical conditions of that nature will show it.

QUESTION: We have problems making employees wear their safety glasses. I know what troubles we would probably have in making them wear hearing protectors, muffs, plugs, and whatnot. I wonder if any study has been made as to the possible use of these things on a temporary or permanent basis?

DR. GUILD: One of the major research projects of our subcommittee on noise is the earplug. Overcoming the passive resistance to the use of either earplugs or ear-muffs certainly is a considerable problem in many industrial situations, especially where the surrounding temperature is high. Encouragement should, therefore, be given persons who have practical ideas as to how to improve wearability of such devices. The best earplug is the one that is worn.

QUESTION: Have any complications arisen from the use of these safeguards—not damage to the ear, but other secondary factors that might come up? What about allergic reactions to the material these are made from and other such problems?

DR. GUILD: There is no doubt whatsoever that the habitual use of earplugs keeps the skin of the deeper part of the ear canal more moist than it would otherwise be. Any occlusion prevents evaporation and retains the secretions. Those conditions favor the development of external otitis, an inflammation of the skin of the ear canal.

A second factor is the chance of dirt being introduced and possible infection. The workman's hands are not clean, so that he may be putting molds and bacteria in his ear canal. I think there are going to have to be some hard, practical considerations given to the expense of cleaning earplugs, furnishing new ones, and so forth as needed.

QUESTION: Would you discontinue the use of plugs or take that as the best thing we have today?

DR. GUILD: I think we should use them and use them on the basis of those that are nonirritating so far as possible, and be careful. I think the harm done by earplugs will be much less than by some of the noises. I do believe that somebody is still going to come up with a comfortable earplug that does not make the ear feel stuffy and still protects the hearing.

Wage Adjustments Announced Prior to March 15, 1954

Company	Union(s)	Number and Type of Employees Affected*	Effective Date	Amount of Adjustment	Fringe Benefits**	Remarks
<i>Apparel</i>						
Industrial Council of Cloak, Suit & Skirt Manufacturers, Inc. New York City	ILGWU, AFL	60,000 WE (approx.)	6-1-54 (date of settlement 1-9-54)	No wage increase	Employers' contribution to industry's retirement fund increased from 3% to 4% effective 6-1-54	Settlement result of contract expiration Length of contract—5 years from 6-1-54 Escalator clause provides for wage reopening when BLS index shows 5% increase
Merchant Ladies Garment Assn., Inc. New York	ILGWU, AFL	40,000 WE (approx.)	6-1-54	No wage increase	Change in amount of contribution made to industry's retirement fund	Settlement made in anticipation of expiration of contract on 5-31-54 Length of contract—3 years effective 6-1-54
<i>Chemicals and Allied Products</i>						
Buckeye Cotton Oil Mill Division of Proctor & Gamble Co. Charlotte, N. C.	DPOWA, ind.	70-75 WE	12-14-53	\$0.04 per hr. av.		Settlement result of contract expiration Length of contract—2 years Wage reopening 12-14-54
Colgate-Palmolive Co. Clarksville, Ind.	Chemical Workers, AFL	1,186 WE	10-1-53	\$0.08 per hr. av.	Four weeks' vacation after 25 years' service	Settlement result of contract expiration Length of contract—1 year
Eagle-Picher Co. Joplin, Mo. Pigment Division	Cement, Lime & Gypsum Workers, AFL	150 WE	11-11-53	\$0.025 per hr. av.		Settlement result of wage reopening Contract expires 4-30-54
Ensign-Bickford Co. Simsbury and Avon, Connecticut	Textile Workers, CIO	275 WE	12-15-53	\$0.05 per hr. av.		Settlement result of wage reopening Contract runs to 3-15-55 Wage reopening upon 15 days' notice
Merck & Co., Inc. Danville, Pa. Rahway, N. J. Chemical Divisions	Gas, Coke & Chemical Workers, CIO	2,200 WE	1-11-54	Rahway—\$0.16 per hr. (for hourly employees) made up of \$0.10 cost of living adjustment added to base rates, plus \$0.06 general increase. Cost of living plan discontinued. Incentive workers received \$0.12 per hr. increase Danville—\$0.10 cost of living adjustment added to base rates; adjustment of over-all rate structure giving additional average increase of \$0.10 per hr. (total increase of \$0.20 per hr.)		First contract at both plants Length of contracts—1 year
S. B. Penick & Co. Lyndhurst, Jersey City, Montville, and Newark, N. J.	Chemical Workers, AFL	325 WE	10-18-54	\$0.05 per hr. av.	Additional \$500 group life insurance after 5 years' service	Settlement result of contract expiration Length of contract—13 mos.
Rohm & Haas Co. Bristol, Pa.	Glass Workers, CIO	n.e. WE	2-15-54	\$0.05 per hr. annual productivity bonus		Settlement resulted from wage reopening provision in 2 year contract Contract expires 2-55
Specialty Resins Co. Lynwood, Calif.	Chemical Workers, AFL	15 WE	12-17-53	10%	Additional week paid vacation after 10 years' service	Length of contract—2 years
	Chemical Workers, AFL	0 S	12-17-53	10%	Same as above	Same as above
W. H. Sweeney & Co. St. Paul, Minn.	Gas, Coke & Chemical Workers, CIO	50 WE (approx.)	11-1-53	\$0.03 per hr. av.	Increased hospitalization, surgical expense, and accident and health benefits under company-paid group policies	Settlement result of contract expiration Contract runs to 1-31-55
Swift & Co. Cleveland Plant Food Factory (Fertilizer Plant)	Gas, Coke & Chemical Workers, CIO	30 WE	10-26-53	\$0.05 per hr. av.	Hospitalization, medical, and surgical plan	Settlement result of contract expiration Length of contract—1 year
<i>Communications</i>						
Connecticut Telephone & Electric Co. Meriden, Conn.	IUE, CIO	620 WE	11-16-53	\$0.06 per hr. av.	(1) Three weeks' vacation after 15 years (2) Additional \$1,000 life insurance (3) Additional \$10.00 per week sickness disability	Settlement result of contract expiration Contract expires 11-2-54

Wage Adjustments Announced Prior to March 15, 1954—Continued

Company	Union(s)	Number and Type of Employees Affected*	Effective Date	Amount of Adjustment	Fringe Benefits**	Remarks
Lincoln Telephone & Telegraph Co. Lincoln, Neb.	Communications Workers, CIO	1,250 WE	12-6-53	\$0.014 per hr. av.		Settlement result of contract expiration Length of contract—12 mos.
The Richmond Home Telephone Co. Richmond, Ind.	Communications Workers, CIO	118 WE	11-22-53	Increases varied from \$.80 to \$1.00 per week		Settlement result of contract expiration Length of contract—1 year
<i>Electrical Machinery, Equipment and Supplies</i>						
American Phenolic Corp. Chicago, Ill.	IBEW, AFL	1,500 WE	1-1-54	\$0.06 per hr. av.	Employee's birthday as paid holiday; if birthday falls on week day, employee must take day off; if it falls on Saturday or Sunday, he can take Monday off or elect just to be paid for the holiday	Settlement result of contract expiration Contract expires 1-1-55
Anaconda Wire and Cable Co. Hastings-on-Hudson, N. Y.	UE, ind.	850 WE	10-12-53	\$0.08 per hr. av.		Settlement result of wage reopening in contract that expires 10-12-54
Eisler Engineering Co. Newark, N. J.	IUE, CIO	106 WE	12-15-54	\$0.03 per hr. av.		Settlement result of contract expiration Length of contract—1 year
Jefferson Electric Co. Bellwood, Ill.	IBEW, AFL	1,180 WE	1-1-54	3%	Birthday as paid holiday	Settlement result of contract expiration Length of contract—2 years Wage reopening 11-6-54
	None	250 S	Not indicated	No increase	Same as above	
Raytheon Manufacturing Co. Waltham, Newton, Quincy, and Lowell, Mass.	IBEW, AFL	12,000 WE	7-1-53	4.7%		Settlement result of contract expiration Length of contract—1 year
<i>Fabricated Metal Products</i>						
Martin-Parry Corp. Toledo, Ohio	UAW, CIO	649 WE	10-2-53	\$0.03 per hr. av.	Increased daily benefits from \$8.00 to \$10.00 and special services from \$127.50 to \$167.50, effective 1-1-54	Settlement result of contract expiration Length of contract—1 year Wage reopening possible 60 days after contract date
	None	219 S	Not indicated	None	Same as above	
<i>Food and Kindred Products</i>						
Campbell Soup Co. Chicago, Ill.	DPOWA, ind.	8,000 WE (approx.)	12-31-53	\$0.06 per hr. av.	(1) Pension plan liberalized (2) Accident-sickness benefits increased from \$25 per week to \$50 per week and at no cost to employee (cost previously shared by company and employee)	Settlement result of contract expiration Length of contract—2 years Wage reopening 12-1-54
Swift & Co. Philadelphia, Pa.	Meat Cutters, AFL	120 WE	Date of settlement 12-7-53, retroactive to 9-29-53	\$0.05 per hr. av.	Hospitalization-medical-surgical plan fully paid by company	Settlement result of wage reopening Contract expires 12-18-54
<i>Leather and Leather Products</i>						
International Shoe Co. Marlinton, W. Va.	District 50, UMWA, ind.	162 WE	11-1-53	\$0.05 per hr. av.	Company paid insurance policy providing following benefits to each employee: (1) Accident and health benefits: \$25 weekly to male employees—\$15 weekly to female employees (2) Hospitalization and surgical benefits for each illness: \$8 daily hospital benefit for 81 days (\$248 maximum); \$100 special hospital charges benefit; \$5 daily in hospital medical benefit for 81 days (\$405 maximum); \$200 maximum surgical benefit; \$100 maternity benefit. Same hospitalization and surgical coverage for employees' dependents upon payment of \$5.25 per month	Settlement result of contract expiration Length of contract—2 years

Wage Adjustments Announced Prior to March 15, 1954—Continued

Company	Union(s)	Number and Type of Employees Affected*	Effective Date	Amount of Adjustment	Fringe Benefits**	Remarks
<i>Machinery (except Electrical)</i>						
Massey-Harris Co. Racine, Wis.	UAW, CIO	1,700 WE	Date of settlement 12-16-53, retroactive to 9-22-53	Increase of \$.10 per hr. for certain skilled trades; certain classifications received inequity adjustments: annual improvement factor increased \$.05 to all hourly workers		Settlement result of contract expiration Length of contract—2 years
	None	950 WE	Same as above	\$8.65 per month		Same as above
Muskegon Piston Ring Co. Muskegon, Mich. Machine Division	Auto Workers, AFL	537 WE	11-30-53	\$.06 per hr. av.		Settlement result of wage reopening Length of contract—2½ yrs. Wage reopening upon 60 days' notice
<i>Ordinance and Accessories</i>						
U. S. Defense Corp. St. Louis, Mo.	IAM, AFL	4,000 WE (approx.)	11-23-53	\$.06 across the board plus \$.0241 per hr. av. for correction of inequities	(1) Pay for jury duty—difference between wages and jury pay (2) 2 weeks' vacation after 3 instead of 5 yrs.	Settlement result of contract expiration Length of contract—1 year
<i>Paper and Allied Products</i>						
Cosca River Newsprint Co. Childersburg, Ala.	IAM; Plumbers; IBEW; Pulp, Sulphite & Paper Mill Workers (all AFL)	903 WE	9-15-53	3%		Settlement result of contract expiration Length of contract—1 year Wage reopening upon 30 days' notice
Crown-Zellerbach Corp. Los Angeles, Calif.	Paperworkers CIO	148 WE	11-1-53	\$.075 per hr. av.		Settlement result of wage reopening Contract expires 11-1-54
Gulf States Paper Corp. Tuscaloosa, Ala.	Paper Makers, AFL; Pulp, Sulphite & Paper Mill Workers, AFL None	1,300 WE (approx.) 150 S (approx.)	11-16-53	3% with \$.05 per hr. minimum 5% approx.	(1) Minor changes in insurance programs (2) Easter Sunday added as paid holiday Same changes in insurance programs as above	Settlement result of contract expiration Length of contract—1 year
Hudson Pulp & Paper Corp. Augusta, Me.	Paper Makers, AFL; Pulp, Sulphite & Paper Mill Workers, AFL	550 WE	Date of settlement 10-3-53, retroactive to 7-1-53	3%		Settlement result of contract expiration Length of contract—1 year Wage reopening in 6 months
Ohio Paper Co. Miamisburgh, Ohio	Paperworkers, CIO	120 WE (approx.)	11-15-53	\$.04 per hr. av.	Additional holiday added—December 24th	Settlement result of contract expiration Length of contract—1 year
West Virginia Pulp & Paper Co. Covington, Va. Luke, Md. Williamsburg, Pa.	Paperworkers, CIO	Not indicated	11-17-53; Vacation plan effective 1-1-54	3%	(1) Premium of \$.03 per hr. for 2nd shift, and \$.06 per hr. for 3rd shift (2) Vacation plan: (a) Covington Mill: 1-5 yrs.' service-1 wk. 5-15 yrs.' service-2 weeks 15 or more yrs.' service-3 weeks (b) Luke and Williamsburg Mills: 1-3 yrs.' service-1 wk. 3-15 yrs.' service-2 weeks 15 or more yrs.' service-3 weeks	Settlement result of contract expiration Contract to continue until 11-17-54, and from year to year unless notice to terminate or change it is given not less than 30 days prior to 11-17-54 or Nov. 17 of any year
<i>Primary Metal Industries</i>						
Bridgeport Brass Co. Indianapolis, Ind.	Steelworkers, CIO	1,500 WE	11-1-53	\$.07 per hr. av.		Settlement result of wage reopening in 2 year contract Contract expires 11-1-54
H. P. L. Manufacturing Co. Cleveland, Ohio	UE, ind.	735 WE	9-14-53	\$.08 per hr. average plus \$.03 per hr. to employees in tool and die depts.	General election day added as seventh paid holiday	Settlement result of contract expiration Length of contract—1 year
<i>Printing and Publishing</i>						
The Franklin Association of Chicago Chicago, Ill.	Printing Pressmen, AFL	1,200 WE	12-16-53	\$6 per week av.	Increased group insurance plan effective 8-16-54	Settlement result of contract expiration Contract expires 8-16-55
<i>Professional, Scientific and Controlling Instruments</i>						
Scientific Glass Apparatus Co. Bloomfield, N. J.	UE, ind.	150 WE 25 S	11-1-53 11-1-53	\$.10 per hr. av. \$.4 per week	Company pays all premiums on life insurance Same as above	Settlement result of contract expiration
<i>Public Service</i>						
Laundry Owners Assn. Oakland, Calif.	Laundry Workers, AFL	300 WE (approx.)	11-1-53	\$.4 per week av.		Settlement result of contract expiration Length of contract—1 year

Wage Adjustments Announced Prior to March 15, 1954—Continued

Company	Union(s)	Number and Type of Employees Affected*	Effective Date	Amount of Adjustment	Fringe Benefits**	Remarks
<i>Public Utilities</i>						
Consolidated Edison Co. of N. Y. New York, N. Y.	Utility Workers, CIO	23,500 WE	1-3-54	\$0.075 per hr. av.*Effective 4-4-54, all employees with 25 or more years of continuous service will be granted additional \$0.05 per hr. increase		Settlement result of contract expiration Length of contract—1 year
South Atlantic Gas Co. Orlando and Winter Park, Florida	Chemical Workers, AFL	37 WE	11-6-53	\$0.06 per hr. across the board	(1) Double and one half time for work on recognized holidays (2) More liberal payments made in addition to workmen's compensation when employee is injured	Settlement result of contract expiration Length of contract—1 year
<i>Stone, Clay and Glass Products</i>						
Celotex Corp. Hamlin, Tex.	Cement, Lime & Gypsum Workers, AFL	165 WE	11-1-53	\$0.05 per hr. av.	Paid holidays increased from 4 to 6	Settlement result of contract expiration Contract continues until 11-1-54 and each year thereafter unless 60 days' notice is given in writing by either party prior to expiration date
Port Clinton, Ohio	Cement, Lime & Gypsum Workers, AFL	130 WE	9-26-53	\$0.055	Pension plan	Settlement result of contract expiration Contract runs through 4-30-55, and thereafter will remain in effect from year to year unless 60 days' notice in writing is given by either party prior to any annual expiration date
Corning Glass Works Charleroi, Pa.	Glass Workers, CIO	1,200 WE	11-22-53	\$0.08 per hr. av.; additional \$0.02 per hr. given employees in 5 classifications to remove inequity	(1) For 3 of 7 recognized holidays, employee may qualify for unworked holiday pay (2) Time off for death in family provision modified to include brother or sister	Settlement result of contract expiration Length of contract—1 year
Jenkins Brick Co. Montgomery, Ala.	Gas, Coke & Chemical Workers, CIO	100 WE (approx.)	8-28-53	\$0.05 per hr. av.		Settlement result of contract expiration Length of contract—1 year Wage reopening upon 30 days' notice
National Gypsum Co. St. Louis, Mo.	Cement, Lime & Gypsum Workers, AFL	75 WE	10-29-53	\$1.59 per hr. av.	(1) Improved vacation plan (2) Company package insurance plan inaugurated, but effective 12-12-53	Settlement result of contract expiration Length of contract—1 year
<i>Textile Mill Products</i>						
Bemis Bros. Bag Co. Bemiston, Ala.	Textile Workers, AFL	924 WE	11-30-53	No wage change except inequity adjustment of about \$0.025 per hr.	No new fringe benefits; company's informal pension policy stated for first time in new contract	Settlement result of contract expiration Length of contract—1 year One reopening per party possible, but not earlier than 2-1-54
Crown Cotton Mills Dalton, Ga.	Textile Workers, CIO	950 WE	12-15-53	No wage adjustment		Contract renewed without change
<i>Transportation</i>						
Capital Airlines Interstate	Air Line Pilots, AFL	475 S	1-1-54	\$50—\$60 per month		Settlement result of wage reopening Length of contract—1 year
The Pennsylvania Railroad Co. Interstate	Railroad Workers, CIO	28,000 WE (approx.)	12-16-53	\$0.05 per hr. av.; cost-of-living clause cancelled; \$1.18 per hr. cost of living adjustment frozen into base rates	Effective 1-1-54, 3 weeks' vacation after 15 or more years' service	Length of contract indefinite
Retail Delivery Co. St. Paul, Minn.	Teamsters, AFL	11 WE	1-18-54	\$0.07 per hr. av.		Length of contract—6 mos.
San Diego Transit System San Diego, Calif.	IBEW, AFL	162 WE	10-1-53	5.14% Increases staggered: \$0.06 effective 10-1-53 \$0.03 effective 1-1-54 \$0.02 effective 7-1-54		Settlement result of contract expiration Length of contract—15 mos.
	Street, Railway & Motor Coach Employees, AFL	540 WE	9-1-53	5.14% Increases staggered: \$0.06 effective 9-1-53 \$0.03 effective 12-1-53 \$0.02 effective 6-1-54		Same as above
	None	102 S	10-1-53	5%		

Wage Adjustments Announced Prior to March 15, 1954—Continued

Company	Union(s)	Number and Type of Employees Affected*	Effective Date	Amount of Adjustment	Fringe Benefits**	Remarks
<i>Transportation Equipment</i>						
Bell Aircraft Corp. Buffalo, N. Y.	UAW, CIO	6,000 WE (approx.)	1-18-54	\$.05 per hr. av.	(1) Sick leave—1 day for each year of seniority after 2 years up to a maximum of 5 days for 5 years (2) Shift differential increased from \$.125 to \$.15 per hr. for second shift, and from \$.075 to \$.10 per hr. for third shift (3) Two additional half-day holidays for Christmas Eve and New Year's Eve (4) Vacation time increased: 6 mos. to 1 yr.—1 week 1 yr. to 10 yrs.—2 weeks 11 yrs.—11 days 12 yrs.—12 days 13 yrs.—13 days 14 yrs.—14 days 15 yrs.—15 days (3 wks.)	Settlement result of contract expiration Length of contract—1 year
	None	4,000 S	Not indicated	2.4%		
Glass Laboratories, Inc. Brooklyn, N. Y.	DPOWA, ind.	17 WE	2-6-54	\$.10 per hr. av.		Settlement result of wage reopening in 2 year contract
<i>Wholesale and Retail Establishments</i>						
Safeway Stores, Inc. Washington, D. C.	Retail Clerks, AFL	1,461 WE	11-29-53	(1) 11-29-53 to 1-29-55 increase of \$2.15 per wk. for 43 hr. week (2) 1-30-55 to 5-29-55 same pay for 41½ hrs. (3) 5-29-55 to 1-28-56 \$.05 per hr. increase for 41½ hours (4) 1-29-56 to 1-28-57 same pay for 40 hours	3 weeks' vacation after 15 years for first 2 years of contract; 3 weeks vacation after 10 years during last year of contract	Settlement result of contract expiration Contract runs from 11-29-53 to 1-28-57
	Meat Cutters, AFL	733 WE	11-29-53	Same as above	Same as above	Same as above
<i>Miscellaneous Manufacturing Industries</i>						
Microcard Corp. La Crosse, Wis.	IUE, CIO	20 WE	11-1-53	\$.085 per hr. av.		Settlement result of contract expiration Length of contract—2 years

* WE, wage earner; S, salaried personnel

** Fringe benefits include all benefits supplemental to wages received by workers at a cost to employers.

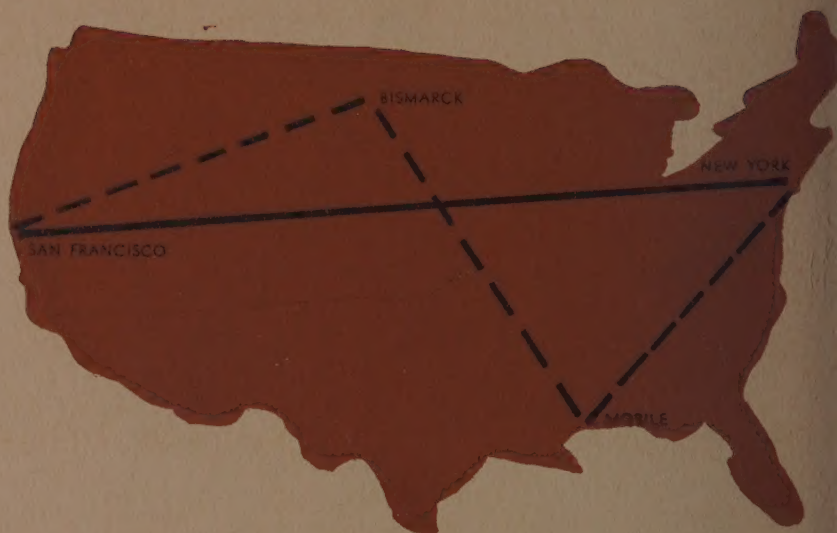
n.a.—Not available.

STUDIES IN BUSINESS ECONOMICS

Published by
THE CONFERENCE BOARD
247 Park Avenue, New York 17, N. Y.

- No. 42—The Business Outlook, 1954
- No. 41—Consumption Taxes and Tax Reform
- No. 40—The Economics of Tariffs
- No. 39—Growth Patterns of Cities
- No. 38—CEA: Retrospect and Prospect
- No. 37—The Business Outlook, 1953
- No. 36—Resources: From Abundance to Scarcity by 1975?
- No. 35—Basic Issues in Decontrol
- No. 34—Postdefense Outlook
- No. 33—I. Credit Policy: Recent European Experience
II. What Monetary Policy? (Round Table)
- No. 32—Growth Patterns in Industry
- No. 31—The Business Outlook, 1952
- No. 30—Strike Controls in Essential Industries
- No. 29—Defense Economics—CEA Model
- No. 28—Key Materials: Current Supply and Outlook
- No. 25—Pros and Cons of Council of Economic
Advisers' Policies
- No. 24—Economics of the Work Week
- No. 23—When Should Wages Be Increased?
- No. 22—Effects of Depreciation Policy
- No. 20—Economics of the President's Economists
- No. 18—America's Mineral Resource Position
- No. 17—Should We Return to a Gold Standard?
- No. 16—An Appraisal of Official Economic Reports
- No. 15—Behavior of Wages
- No. 13—The Price Problem Reexamined
- No. 12—Britain's Economic Crisis
- No. 11—The Need for Federal Tax Revision
- No. 10—Dividend Policy and Tax Problems
- No. 9—The 'Miracle' of Productivity
- No. 8—Union Health and Welfare Funds
- No. 6—Full Employment and Scarcity
- No. 5—Will the Guaranteed Annual Wage Work?

First
you've got
to know
where
you're going



THEN YOU'VE GOT TO KNOW HOW TO GET THERE

Let's say your destination is San Francisco. You could start out by way of Mobile, Alabama and Bismarck, North Dakota. But if you get to Frisco at all, it will take a long time and a lot of money. And of course, there is a better way to reach your destination—with no detours and no lost motion.

The same is true for an employee magazine or newspaper. First management has to decide on the goals and objectives of a publication. And then it has to determine the best means of achieving them. All too often money and energy are wasted because nobody has bothered to do this initial planning; nobody knows what management wants the publication to accomplish.

Objectives are one of the many important aspects of "Employee Magazines and Newspapers" that are examined extensively in this Conference Board report. Any company that is planning to launch an employee publication, or any company that feels its employee publication is not doing the job it should, will find valuable guideposts here to help in achieving maximum results.

EMPLOYEE MAGAZINES and NEWSPAPERS

STUDIES IN PERSONNEL POLICY, NO. 136